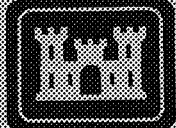


Pollution Prevention Plan

for

Hop Brook Lake

APPENDICES



**US Army Corps
of Engineers**
New England Division

August 1996

POLLUTION PREVENTION PLAN

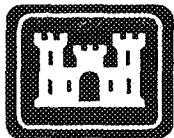
APPENDICES

LOCATION:

HOP BROOK LAKE
MIDDLEBURY, CONNECTICUT

PREPARED BY:

ENGINEERING DIRECTORATE
WATER CONTROL DIVISION
ENVIRONMENTAL ENGINEERING
AND HYDRAULICS BRANCH



US Army Corps
of Engineers
New England Division

POLLUTION PREVENTION PLAN
APPENDICES

Following are appendices for the Hop Brook Lake Pollution Prevention Plan. Appendices A, B, C, and D are available at the project and will be inserted by the basin manager.

<u>Appendix</u>	<u>Subject</u>
A	Figures
	1 Hop Brook Lake Location Map
	2 Naugatuck River Basin Map
	3 Hop Brook Lake Dam Layout
	4 Hop Brook Lake Reservoir Map
	5 Locations of Oil Storage Tanks
B	Oil Storage Tank Inventory
C	Chemical Product Inventory
D	Listing of Oil and Hazardous Substances and Reportable Quantities
D1	Oil and Other Petroleum Products Stored at Hop Brook Lake
D2	List of Hazardous Substances and Reportable Quantities per 40 CFR 302
E	Project Activities and Related Wastes
F	Hop Brook Lake's Pollution Prevention Strategy Sheet
G	Recyclable Items at Hop Brook Lake
H	Connecticut Department of Environmental Protection Recycling Services Directory
I	Pollution Prevention Technical Assistance Programs
J	Defense Logistic Agency Centers
K	Executive Order 12856

- L Title 40, CFR, 1995 rev, Part 112.7; Oil
Pollution Prevention
- M Glossary
- N References
- O Amendments/Changes to P2 Plan

Appendix A

Figures

- 1 Hop Brook Lake Location Map
- 2 Naugatuck River Basin Map
- 3 Hop Brook Dam Layout
- 4 Hop Brook Lake Reservoir Map
- 5 Locations of Oil Storage Tanks

Appendix B

Oil Storage Tank Inventory

Appendix C

Chemical Product Inventory

Appendix D

Listing of Oil and Hazardous Substances and Reportable Quantities

Appendix D1

Oil and Other Petroleum Products
Stored at Hop Brook Lake

Appendix D2

List of Hazardous Substances and Reportable
Quantities per 40 CFR 302

Appendix E

Project Activities and Related Wastes

PROJECT ACTIVITIES AND RELATED WASTES

<u>Process Source</u>	<u>Waste Examples</u>
Air Emissions	
Painting Volatiles	Paint VOCs
Solvent Volatiles	Solvent VOCs
Vehicle Emissions	Carbon Monoxide
Other Air Emissions	Asbestos
Hazardous Wastes	
Chemical Paint Stripping	Paint Strippers, paint sludge
Products with Expired Shelf Life	Expired shelf life wastes such as paints, solvents, cleaning materials, etc.
Fluid Change Out/Purging & Vehicle Maintenance	Oily waste, lubricating oil, hydraulic fluid, contaminated fuel, brake fluid, antifreeze, windshield washer fluid, automobile batteries
Facility/Project Lands Maintenance	Cleaning supplies/chemicals, fertilizer, signs, yard refuse, illegally dumped waste (tires, roofing shingles, etc.)
Painting Operations	Paint, paint sludges
Spill Cleanup	Absorbent, rags, booms, pigs, drip pans, contaminated soil
Solvents/Degreasing/Cleaning	Cleaning solvents, Methyl Ethyl Ketone (MEK)
Transformer Replacement	PCBs
Pesticide/Herbicide Treatment	Pesticide/herbicide waste
Equipment/Machine Maintenance	Cleaning solvents, lubricating oils & greases
Other Wastes	
Office Operation	Paper, shipping and packing materials, newspapers, containers (plastic, glass, metal), household batteries, fluorescent lamps & ballasts
Log Boom	Wood, miscellaneous debris
Public Use Areas	Miscellaneous wastes, containers (plastic, glass, metal), paper products
Construction/Renovation	Asphalt, construction debris (concrete, lumber, etc.)

Appendix F

Hop Brook Lake's Pollution
Prevention Strategy Sheet

HOP BROOK LAKE'S POLLUTION PREVENTION STRATEGY SHEET

<u>GOAL</u>	<u>ESTABLISHED</u> <u>BY</u>	<u>TARGET</u> <u>DATE</u>
Contribute to the 25 to 50% reduction of the total waste stream within the Naugatuck River Basin.	NED	1999
Reduce all hazardous substances/wastes located at Hop Brook Lake to quantities below reportable quantities/limits that are set by the CT DEP.	NED	1999
Provide approved secondary containment structures for all chemical/oil storage tanks located at Hop Brook Lake.	NED	1999

Appendix G

Recyclable Items at Hop Brook Lake

RECYCLABLE ITEMS AT HOP BROOK LAKE

<u>Operation</u>	<u>Recyclable</u>	<u>Description</u>
Office Operation	Paper	-High grade office paper (computer paper, stationary bond, copy machine paper, miscellaneous plain paper) -Newspaper -Magazines -Cardboard
	Food and Drink Containers	-Glass -Metal (aluminum, tin) -Plastic - Polyethylene Terephthalate (PET), High Density Polyethylene (HDPE), Polyvinyl Chloride (PVC), Low Density Polyethylene (LDPE), Polypropylene (PP), Polystyrene (PS), Other -Aseptic packaging (paper milk cartons, drink boxes)
	Batteries (other than car batteries)	-Nickel cadmium batteries
Equipment/Vehicle Maintenance	Motor Oil	
	Antifreeze	
	Car Batteries	
	Tires	
Construction/Renovation	Construction and Demolition Debris	-Asphalt, bricks, concrete (ABC), soil, rock, wall coverings, drywall, plumbing fixtures, insulation, roofing shingles, glass, metal, wood waste, electrical wires
Facility/Project Maintenance	Yard Waste & Composting	-Prunings, bulky wood yard waste (e.g. trees, large branches, and stumps), leaves, grass clippings

Appendix H

Connecticut Department of Environmental
Protection Recycling Services Directory

List of Contacts

The following pages give names of companies which collect or recycle various materials. The list is not complete because the field is constantly changing. Consequently, the following names are provided for additional information on recycling services.

David Westcott
Office of Pollution Prevention
Planning & Standards Division
Waste Management Bureau
State of Connecticut Department of Environmental Protection
Phone (860) 424-3666
Fax (860) 424-4060

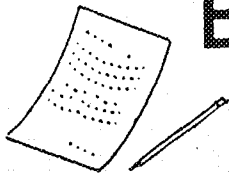
Judy Belaval
Source Reduction and Recycling
Planning & Standards Division
Waste Management Bureau
State of Connecticut Department of Environmental Protection
Phone (860) 424-3365
Fax (860) 424-4060

Recycling Services in Connecticut

Services Covered

Batteries, Lead-Acid
Bulky Waste
Construction and Demolition Debris
Fluorescent Lamps
Glass
HDPE
Household Hazardous Waste
Metals
Oil
Paper
Plastics
Propane Tanks
Wood Pallets
Yard Waste

General Information



BUSINESS RECYCLING



A DEP Recycling Program Fact Sheet

How to Recycle Lead-Acid Batteries

Recycling lead acid batteries: What is required?

PA 87-544 and the recycling regulations require the recycling of "storage batteries" in Connecticut by January 1, 1991. Storage batteries include lead acid batteries used in motor vehicles (such as automobiles, airplanes, boats, recreational vehicles, and tractors). In 1990, PA 90-248 established a mandatory deposit and redemption system that will capture lead acid batteries for recycling and prohibits the disposal of used lead acid batteries with mixed municipal solid waste by October 1, 1990.

If your business uses and maintains a fleet of vehicles, you will need to arrange for the recycling of lead acid batteries. After October 1, 1990, used batteries can be delivered to the following facilities for recycling:

- 1) Retailers or wholesalers. Between October 1, 1990, and April 1, 1992, retailers must accept up to 3 used batteries from a consumer (even if the consumer does not purchase a battery). After October 1, 1990, any person who purchases a battery shall return a used battery or pay a \$5 deposit for each new battery purchased. A \$5 refund shall be given if a used battery is returned within 30 days after purchase of a new battery and the consumer has a receipt.
- 2) A recycling facility, secondary lead smelter permitted by the US EPA, or scrap metal processor. If your business generates large quantities of used lead acid batteries (this would apply to service stations, for example), you should store them properly and arrange to have them recycled by one of the types of facilities listed above. Call the DEP for a fact sheet entitled "How to Recycle Lead Acid Batteries" which describes how properly to handle and store batteries. Depending on market conditions, you may receive a payment for your batteries. You will not receive a refund of any deposit paid because the refund requirement applies only to retailers.
- 3) A municipally established collection site. Call the recycling coordinator or public works director for your town to see if there is a municipal collection site where businesses can drop off used lead acid batteries. Because the \$5 refund from battery deposits is available from retailers only, do not expect to receive any payment for your batteries from a municipal recycling program.

If your business sells lead acid batteries retail or wholesale...

PA 90-248 places the following requirements on retailers and wholesalers of lead acid batteries:

No retailer shall dispose of a used battery except by delivery to one of the following: 1) a wholesaler, 2) a battery manufacturer for delivery to a secondary lead smelter permitted by the US EPA, 3) a recycling center, 4) a secondary lead smelter permitted by the US EPA, or 5) a scrap metal processor.

From Oct. 1, 1990 - April 1, 1992, retailers must accept up to 3 used batteries from a consumer (even if the consumer does not purchase a battery). A deposit refund is only required if the consumer presents a receipt.

Each retailer must post a written notice at his/her place of business advising customers that: it is illegal to discard a battery with solid waste; batteries must be recycled; the retailer must accept up to 3 batteries from a consumer (even if he/she is not purchasing a new battery) until April 1, 1992; after April 1, 1992, the retailer must accept a used battery for recycling in exchange for the purchase of a new battery. This notice must be at least 8-1/2 inches wide and at least 11 inches long.

All unclaimed deposits shall accrue to the retailer.

A wholesaler must accept at the point of transfer used batteries from retailers or consumers (as many as the number of new batteries purchased).

Wholesalers must remove batteries from the retail point of collection within 90 days.

Penalties are established for violations of these requirements.

If retailers and wholesalers need information on how to properly handle and store lead acid batteries, call the DEP Recycling Program for a copy of the DEP Fact Sheet entitled "How to Recycle Lead Acid Batteries" and/or call George Dews of the DEP at 566-4869.

How are lead acid batteries recycled?

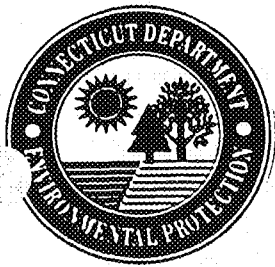
Battery recyclers separate the useable components of the battery and reclaim the lead, most of which is used to make new batteries. Small percentages of recycled lead can also be used in such products as lead shot, radiation shielding, and grease compounds. The acid from the batteries is either recycled or neutralized and disposed of. The plastic battery case can also be recycled.

Prepared by Connecticut
DEP Recycling Program
July 1990



For more information
contact: Lynn Stoddard
at 566-8722

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DEP Recycling Program Fact Sheet

Bulky Waste Processing and Recycling Facilities

Permitted Volume Reduction and Recycling Facilities That Handle Bulky Waste

Facility Name, Address, Permittee and (Phone Number)	Type of Facility *	Services Offered *	Permitted Capacity
MB Assoc. 414 New Britian Ave, Berlin, CT., CRP Limited Partnership, (229-4853)	Volume Reduction	A, B, C, E, F	115 Tons Per Day
Recycled Fibers of Connecticut, 260 Tolland Turnpike, Manchester, CT., NS Realty Recycling Facility, (643-8545)	Recycling Facility	A, B, C, D, E, F	150 Tons Per Day
Somers Sanitation Services, 9 Shoham Rd., East Windsor, CT., Somers Sanitation Services, (623-2070)	Volume Reduction	A, B, C, D, E, F	200 Tons Per Day
C&R Sanitation, 240 Stamm Rd., Newington, CT., C&R Sanitation, (667-1185)	Volume Reduction	A, B, C, D, F	48 Tons Per Day
Waste Conversion Technologies Inc., 221 Old Gate, Milford, CT., Stapleton RRI, (882-5353)	Volume Reduction	A, B, C, E	500 Tons Per Day
DPL Refuse Transfer Station, 19 Wheeler Street, New Haven, CT., DPL Refuse Service Inc., (387-8537)	Transfer Station	A, B, C, F	69 Tons Per Day
AWD Recycling Facility, 307 White Street, Danbury, CT., Recycling Technologies Inc., (797-0378)	Recycling Facility	A, B, C, D, E, F	168 Tons Per Day
Waste Management Norwalk VRF, 8-18 Meadow Street, Norwalk, CT., Waste Management of Norwalk, (853-2595)	Volume Reduction	A, B, C, D, F	300 Tons Per Day
PM Services VRF, 25 Norton Place, Plainville, CT., PM Services Inc., (747-1335)	Volume Reduction	A, B, C, D, F	150 Tons Per Day
Stamford SCRI, 39 Woodland Street, Stamford CT., Southern Connecticut Recycling Inc., (975-0488)	Volume Reduction	A, B, C, D, F	300 Tons Per Day
McCauley Enterprises, 147 Murphy Road, Hartford CT., McCauley Enterprises, (724-4575)	Volume Reduction	A, B, C, F	295 Tons Per Day
CRRA VRF, Pent Road, Wallingford, CT., CRRA, (284-1516).	Volume Reduction	A, B, C, F	40 Tons Per Day
Galbo Recycling Facility, 56 Minor Lane, Waterford, CT., (887-4811)	Volume Reduction	A, B, C, D, F	97 Tons Per Day
Dependable VFR, 184 Municipal Road, Waterbury, CT., Dependable Rolloff Inc.	Volume Reduction	Currently Not Operating	250 Tons Per Day

* See reverse side for additional information

There are currently 13 permitted volume reduction facilities operating in Connecticut. Each facility permit specifies processing equipment, source materials, recycling/reuse destinations, ultimate residue disposal destinations and quality control parameters. The permit for each facility is different. For services offered and specific materials accepted, please contact the individual facilities. This list is current as of the date issued and is subject to change. Additional volume reduction facilities have submitted permit applications that the Department is reviewing.

Many other facilities are permitted or registered with the DEP to process solid waste and recyclables in addition to the volume reduction facilities listed on the reverse side. This is only a partial listing of the facilities capable of managing bulky waste items and by providing it to you, the Department of Environmental Protection is not recommending these companies over any others. For additional information on recycling options or processing and disposal facilities operating in Connecticut, contact the Department of Environmental Protection, Waste Management Bureau, Recycling Program at (203) 424-3365 or the Waste Engineering and Enforcement Division at (203) 424-3028.

Type of Facility:

"Recycling Facility" or "Recycling Center" means land and appurtenances thereon and structures where recycling is conducted, including but not limited to, an intermediate processing center as defined in section 22a-260 of the CGS. (CGS Section 22a-207(8))

"Transfer Station" means any location or structure, whether located on land or water, where more than ten cubic yards of solid waste, generated elsewhere, may be stored for transfer or transferred from transportation units and placed in other transportation units for movement to another location, whether or not such waste is stored at the location prior to transfer. (CGS Section 22a-207(10))

"Volume Reduction Plant" means any location or structure, whether located on land or water, where more than two thousand pounds per hour of solid waste generated elsewhere may be reduced in volume, including but not limited to, resource recovery facilities and other incinerators, recycling facilities, pulverizers, compactors, shredders, balers and composting facilities. (CGS Section 22a-207(5))

"Bulky Waste" means landclearing debris and waste resulting directly from demolition activities other than clean fill. (RCSA Section 22a209-1)

Services Offered:

- A Accepts demolition debris.
- B Accepts landclearing debris.
- C Accepts construction debris.
- D Accepts recyclables from residential or commercial collection programs, (E.G., office paper, newspaper, old corrugated containers, bottles, cans...). Contact the facility to determine specific items accepted.
- E Independent private and commercial spot waste accepted at the facilities.
- F Facilities contract with individuals or firms to allow use of facility.

BUSINESS RECYCLING

A DEP Recycling Program Fact Sheet

Construction and Demolition Aggregate Recycling Facilities

This list of companies operate clean fill, concrete, rubble, and asphalt recycling facilities in Connecticut. The name, phone number, and contact person of the company and location of the established drop-off facility is listed. This is only a partial listing, and by providing it to you, the Department does not recommend any of these companies over any others.

Recycled Concrete Products Apothecaries Road East Windsor, CT 06106 Contact: Don Mucci @ 1-800-742-6701	Bedrock, Inc. 15 South Smith Street East Norwalk, CT 06855 Contact: Lou DeBaradinis @ (203) 348-2775
Waste Conversion Technologies, Inc.. 221 Old Gate Lane Milford, CT 04460 Contact: Scott Walker @ (203) 445-2457	John J. Brennan Construction 2 Riverdale Avenue Shelton, CT 06484 Contact: Howard Vagt @ (203) 929-6314
Burns Construction Housatonic Avenue Bridgeport, CT 06604 Contact: Edward Burns @ (203) 375-1383	O & G Industries, Inc. 240 Bostwick Avenue Bridgeport, CT 06604 Contact: John Leverty @ (203) 366-4586
Wilcox Trucking 83 Old Windsor Road Bloomfield, CT 06095 Contact: Mrs. Wilcox @ (203) 243-8870	Valley Sand & Gravel 400 North Frontage Road North Haven, CT 06473 Contact: William Laydon @ (203) 467-6328
Sonoco Services 185 South Road Groton, CT 06340 Contact: Steven Chisholm @ (203) 445-2457	Tilcon Connecticut Colt Highway, Route 6 Farmington, CT 06032 Contact: Joe Donaroma @ (203) 677-1643
Art Barber Excavating, Inc. New State Road Manchester, CT 06040 Contact: Art Barber @ (203) 875-3892	Hubert E. Butler Route 66 Portland, CT 06480 Contact: Nancy Kelly @ (203) 342-3880
Roncari Industries 1776 South Main East Granby, CT 06026 Contact: Bob Bertolo @ (203) 527-1825	American Materials Corp. 100 Old Iron Ore Rd. Bloomfield, CT 06095 Contact: Bogdan Bodnar @ (203) 242-6023

These facilities are active as of December 1995.

Please see reverse side for additional information.

Highway Construction and Demolition Debris Management

Asphalt, concrete, brick and block and clean fill earthen materials, referred to as construction and demolition aggregate debris (C&DD), are generated during most construction and renovation projects and some demolition related activities. Asphalt, concrete and other inert materials can be considered clean fill. "Clean fill" is defined in Section 22a-209 of the Regulations of Connecticut State Agencies as natural soil, rock, brick, ceramics, concrete, and asphalt paving fragments which are virtually inert and pose neither a fire threat nor a pollution threat to ground or surface water.

The placement of clean fill is exempt from solid waste regulations. Siting requirements for clean fill recycling facilities are typically regulated at the municipal level by municipal conservation and zoning commission requirements. Surplus C&DD materials are a valuable resource when managed appropriately. Managing this once discarded resource is a growing business and cost saving opportunity for municipalities and private companies. In addition to the private processing and recycling facilities listed on the reverse side, many construction companies operate mobile crushing, screening, and sorting facilities for custom recycling work on construction and demolition sites.

On-site recycling at construction and demolition projects has many economic advantages. C&DD rubble can be crushed and reused on site as sub-base and backfill material reducing disposal, transportation and fill replacement costs on some projects. Municipalities and private companies can stockpile C&DD in a centralized location in town and periodically crush and sort the aggregate materials into reusable construction products.

Environmental regulations protecting ground and surface waters and municipal zoning regulations have greatly reduced the availability of land for the disposal of C&DD clean fill. Difficulty in siting new gravel or quarry operations and virgin stone products prices as well as limitations placed on the disposal options for C&DD surplus materials has created an economic framework that favors recycling. The Department is promoting the recycling of construction and demolition aggregate to conserve resources and diminish potential illegal dumping in environmentally sensitive areas.

DEP has developed a policy to allow the recycling of road sand sweepings by blending the sweepings with aggregate materials for re-use. This DEP policy is available upon request. Municipalities should review and implement the DEP policy for the reuse and recycling of road sand sweepings. Municipalities should evaluate the cost benefit potential of recycling municipally generated C&DD. The DEP encourages all municipalities to develop a C&DD management plan that encourages recycling and conserves resources.

For more information, call or write:

Connecticut Department of Environmental Protection
Waste Management Bureau, Recycling Program
79 Elm Street
Hartford, CT 06106
(203) 424-3365

Prepared by the Connecticut DEP Recycling Program

December 1995

Printed on recycled paper



Managing Household Hazards

A DEP Fact Sheet on Household Hazardous Waste

Fluorescent Lamp Recycling Facilities

The following businesses have indicated that they accept fluorescent lamps for recycling. Contact the facility for the types of lamps they accept and the conditions for delivery. This is only a partial listing and by providing it to you, the Department of Environmental Protection is not recommending these companies over any others. The DEP does not imply that these companies are in compliance with applicable laws.

Advanced Environmental Recycling
Corporation
Allentown, PA
1-800-554-AERC

Advanced Recycling
Concord, NH
1-800-227-3911

ALTA Resource Management Services
Springfield, MA
1-800-730-2582

American Lamp Recycling
Fishkill, NY
1-800-315-6262

Global Recycling Technologies
Stoughton, MA
(617) 341-6080

Mercury Refining
Albany, NY
1-800-833-3505

Lighting Recycling Inc.
Brookline, MA
(617) 734-1047

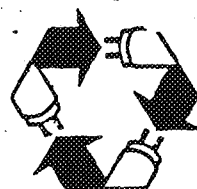
Salesco Systems
Braintree, MA
1-800-368-8878

Northeast Lamp Recycling
East Windsor, CT
(860) 292-1992

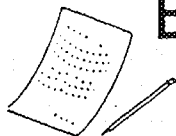
Eastern Environmental Technologies
Port Chester, NY
(914) 856-2014

Wade Environmental
Atco, NJ
(609) 767-2760

Prepared by Connecticut DEP Recycling Program, March, 1996
For more information, contact Tom Metzner at (860) 424-3365



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BUSINESS RECYCLING

A DEP Recycling Program Fact Sheet



GLASS RECYCLING MARKETS

The Department is aware of the following glass markets in Connecticut and nearby states. These markets accept color separated container glass, free of contaminants such as ceramics, stones, gravel, etc. Some companies allow metal rings and caps. This is only a partial listing and by providing it to you, the Department of Environmental Protection is not recommending these companies over any others.

CONNECTICUT

Connecticut Container Recovery
Corp./REI
150 Colonial Road
Manchester, CT 06040
contact: Bill Leonard
telephone: 646-7573

Diamond Bathurst, Inc./
Anchor Glass Corp.
Route 101
Dayville, CT 06241
contact: Ms. Dale Johnson
telephone: 774-9636

Stratford Baling Corp.
80 Garfield Ave.
Stratford, CT 06597
contact: John Mastroianni
telephone: 377-7491
* will consider accepting color
separated glass from paper accounts

MASSACHUSETTS

Foster-Forbes Glass
National Can Co.
1 National Ave.
Milford, MA 01757
contact: Gene Riggs
telephone: (617) 478-2500
* prefer cullet

New England CRINC
74 Salem Road
North Billerica, MA 01862
contact: Bob Torriere
telephone: (508) 667-0096
* accepts unprocessed glass

NEW JERSEY

Ball Glass Container
1 Minue Street
Cateret, NJ
contact: Kevin Shipley
telephone: (201) 969-1400
* accepts clear glass only
* prefer cullet

Owens- Illinois/Brockway
Center Street
Freehold, NJ 07728
contact: Roger Wangerien
telephone: (201) 462-6500
* prefer to crush

Pace Glass, Inc.
73-75 Cornelson
Jersey City, NJ 07304
contact: Vinnie Pace
telephone: (201) 432-7983

(over)

NEW YORK

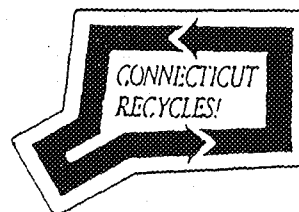
Anchor Glass Container Corp.
1901 Grand Central Ave.
Elmira, NY 14902
telephone: (607) 737-3531

Central New York Bottle Co.
RD#6, County House Road
Auburn, NY 13021
telephone: (315) 255-5201

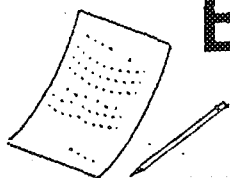
J. Bass & Sons
9-11 Carolton Ave.
Mt. Vernon, NY 10550
contact: Bob Bass
telephone: (914) 667-1442

Owens-Illinois/Brockway Glass
Great Bear Road, RD#5
Fulton, NY 13069
telephone: (315) 598-0931

Prepared by Connecticut
DEP Recycling Program
September 1989



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BUSINESS RECYCLING



A DEP Recycling Program Fact Sheet

HDPE MARKETS

High-density polyethylene (HDPE) plastic containers such as milk jugs, water bottles, laundry detergent bottles and automotive oil bottles are marketable if collected in adequate quantity and densified. Section 22a-255b of the Connecticut General Statutes requires plastic containers sold in Connecticut after January 1990 bear a code identifying the type of plastic. HDPE bottles can be identified by looking for the acronym HDPE and the number 2 on the base of a bottle.

The reason minimal efforts in Connecticut have been directed at HDPE recycling is that the light and voluminous nature of plastic containers makes collection costly in relation to tonnages recovered. However, markets for HDPE plastic do exist. The following list includes companies which have indicated a willingness to accept HDPE. This is only a partial listing and by providing it to you, the Department of Environmental Protection is not recommending these companies over any others.

Eaglebrook Plastics, Inc.
2600 W. Roosevelt Rd.
Chicago, IL 60608
(312) 638-0006

- * bale clear separately from colored for better price

Ontario Recycling, Inc.
12 Cairn Street
Rochester, NY 14611
contact: Paul Kubrich
(716) 328-4253
* \$200/net ton FOB Rochester

M.A. Industries
303 Dividend Drive, Box 2322
Peachtree City, Georgia 30269
contact: Jacki Reed
(404) 487-7761 ext. 320
* will accept baled mixed HDPE and PET
* pay more for plastics separated by resin and color
* will arrange for shipping from CT facilities

Plastics Recovery Corporation
75 Daggett Street
New Haven, CT 06519
contact: Thomas J. Goetting
(203) 785-0458
* accepts various plastics including HDPE & PET
* prefers baled over granulated material

Midwest Plastics
811 Collins Road
Stoughton, WI 53589
contact: David Kolitz
(608) 873-5402
* color separation not required

Plastics Recycling, Inc.
RR 3, Box 182
Iowa Falls, IA 50126
contact: Gregory Mattson
(515) 648-5073
* buy color-separated HDPE
* offer machinery credit w/long term contracts

(over)

Polymerix, Inc.
1A Frassetto Way
Lincoln Park, NJ 07035
contact: Buzz Meyerson
(201) 633-7600
* accepts mixed plastics
* will supply granulator for
large supplier entering long
term contract

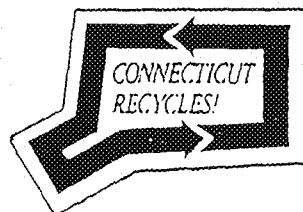
Shuman Plastics
35 Neoga St.
Depew, NY 14043
contact: Bruce Gilburne
(716) 685-2121
* handle variety of plastic
materials
* material must be separated
by resin
* truckload quantities preferred

Stratford Baling
80 Garfield Ave.
Stratford, CT
contact: John Mastroianni
(203) 377-7491

Unique Products, LTD
310 Main Street
East Haven, CT 06512
contact: Joe Vegliante
(203) 469-2332
* broker

United Resource Recovery, Inc.
411 Olive Street, Dept. C
Findlay, OH 45840
contact: Michael Harris
(419) 424-8266
* bale clear and colored separately
* truck load quantities preferred

Prepared by Connecticut DEP
Recycling Program
August 1989



For more information,
contact:
Anne Gobin, 566-8722

Printed on Recycled Paper

Managing Household Hazards

A DEP Fact Sheet on Household Hazardous Waste

Household Hazardous Waste Vendors

The following companies have expressed an interest in participating in Household Hazardous Waste Collections in Connecticut. This is only a partial listing and by providing it to you, the Department of Environmental Protection is not recommending these companies over any others. When selecting a vendor for your hazardous waste collection, consider the track record of the company, the disposal sites used, reuse and recycling options, and liability they are willing to assume.

AETC, Transporting as
Environmental Transfer Corp.
51 Belamose Ave. Suite B
Rocky Hill, CT 06067
Contact: Jim Sullivan
(203) 257-0445

APTUS Environmental Services
21750 Cedar Ave.
P.O. Box 550
Lakeville, MN 55044
Contact: Tim Hinchcliff
(612) 469-3475

Connecticut Treatment Corp.
51 Broderick Road
Bristol, CT 06010
Contact: Chris Borowy
(203) 583-8917

Radiac Research Corp.
261 Kent Ave.
Brooklyn, NY 11211
Contact: Alfred Block
(718) 963-2233

Triumvirate Environmental, Inc.
345 Dorchester Ave.
Boston, MA 02127
Contact: Kristen Mandile
(617) 269-9080

Environmental Products & Services Inc.
147 Wheeler Avenue
Bridgeport, CT 06606
Contact: Stephanie Neveleff
367-3774

Laidlaw Environmental Services
Northeast, Inc.
221 Sutton Street
North Andover, MA 01845
Contact: LeAnn Merashoff
(508) 683-1002

Clean Harbors, Inc.
10 Mercer Road
Natick, MA 01760
Contact: Patrick O'Toole
(508) 655-8863

Tri-S, Inc.
25 Pinney Street
Ellington, CT 06029
Contact: Phil Smith
(203) 875-2110

AETC-New England
398 Cedar Hill Street
Marlboro, MA 01752
Contact: Ed Kofarski
(508) 460-9960

Division Transport
435 Lawrence Bell Drive, Suite 9
Williamsville, NY 14221
Contact: Bid Coordinator
(716) 632-0966

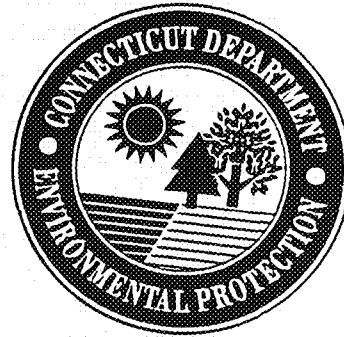
Clean Venture
Hazardous Waste Management
655 Washington Blvd. Suite 506
Stamford, CT 06901
Contact: Jane Rowan
(203) 969-2800

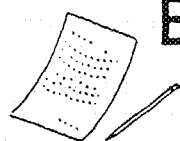
Pat Perretti Freight Service, Inc
73 Greenpond Road
Rockaway, New Jersey 07866
Contact: Robert Roselli
(201) 625-3300

Safety Kleen
392 East Merrow Road
Tolland, CT 06084
Contact: Ray Zimmerman
(203) 871-0027

General Chemical Corp
133-138 Leland Street
Framingham, MA 01701
Contact: Jim Mullooney
(508) 872-5000

Prepared by Connecticut DEP
Recycling Program, 1996
For more information, contact Tom Metzner at DEP
(860) 424-3365





BUSINESS RECYCLING

A DEP Recycling Program Fact Sheet



Recycling Scrap Metal

Scrap metal has been designated for recycling in accordance with Connecticut's Mandatory Recycling Act. The recycling regulations define scrap metal as "used or discarded items which consist predominantly of ferrous metals, aluminum, brass, copper, lead, chromium, tin, nickel or alloys thereof, including, but not limited to, white goods and metal food containers." After January 1, 1991, scrap metal must be separated for recycling.

Many industrial and commercial facilities have significant amounts of waste classified as scrap metal. (For the purposes of this fact sheet, metal food containers will not be considered because another fact sheet discusses methods of recycling those items.) These businesses will be responsible for making arrangements to recycle the scrap metal they generate.

Large generators of scrap metal who have sufficient space can separate the material on site to meet market specifications and transport it directly to a scrap metal processor. Those who generate smaller amounts and/or face serious space constraints can contract with a private hauler to collect the scrap metal (commingled with other commercial recyclables such as corrugated paper, pallets, plastics, etc.), sort it at another location and market it. Scrap metal should not be commingled with bottles and cans or non-recyclable trash. Small generators may find it advantageous to share storage facilities and hauling arrangements with other businesses in their building complex or industrial park.

Regardless of the method selected, it is important to handle the metals carefully because some industrial/commercial machinery and appliances contain small PCB capacitors, PCB transformers, or hydraulic fluids. These contaminants need to be removed before most scrap dealers will accept the metal. The DEP has developed an educational program which trains individuals to identify, locate, remove and dispose of PCB capacitors. For information on this program, contact Carey Hurlburt at 393-2449 or 566-2852.

Although a complete listing of scrap metal dealers can be found in the *Business to Business Yellow Pages*, the following scrap metal dealers have indicated a willingness to accept municipal scrap metal if prepared to their specifications. As with any recovered material, a better price is paid for large quantities of properly segregated metals. Contact dealers directly to learn what types of metals they accept, transportation and equipment available, preparation requirements, and price quotes. This is only a partial listing and by providing it to you, the Department of Environmental Protection is not recommending these companies over any others.

Albert Brothers
225 E. Aurora St.
Waterbury, CT 06721
contact: Dave Bessette
753-4146

Joseph Freedman Co.
40 Albany St.
Springfield, MA 01101
contact: Dick Boucher
522-6395

Alderman-Dow Iron & Metals
358 Chapel St.
New Haven, CT 06511
contact: Norman Alderman
562-1594

H. Bixon & Sons
808 Washington Ave.
New Haven, CT 06519
contact: David Bixon
777-7445

Calamari Brothers
20 Trumbull St.
New London, CT 06320
contact: Paul Calamari
442-5794

Environmental Maintenance
75 East Aurora St.
Waterbury, CT 06708
754-2111

MJ Metals
561 No. Washington Ave.
Bridgeport, CT 06604
contact: Jeff Dreyer
334-3484
* accept all municipal scrap &
metal food containers

Ostrinsky Inc.
731 Parker St.
PO Box 128
Manchester, CT 06040
contact: Sandy
643-5879

Reynolds Aluminum Co.
117 Murphy Rd.
Hartford, CT 06114
contact: Alexander Polgardi
278-6136
* aluminum only

Rubino Brothers
560 Canal St.
Stamford, CT 06904
323-3195

Suisman & Blumenthal
500 Flatbush Ave.
Hartford, CT 06106
contact: Bob Tyrol
522-3123

Prepared by Connecticut
DEP Recycling Program,
January 1990
Contact: Lynn Stoddard, 566-8722

J.W. Green Co.
2676 So. Washington St.
Plainville, CT 06062
contact: George McAdoo
747-5514

Jacob Brothers
1240 Seaview Ave.
Bridgeport, CT
contact: Joel Jacob
367-5341
* no light iron or mixed scrap

S. Kasowitz & Sons, Inc.
149 Front Ave.
West Haven, CT 06516
contact: Steven Kasowitz
932-5978

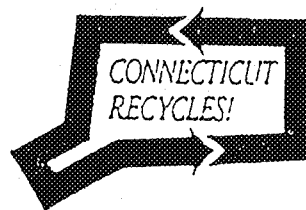
Lajoies
Meadow Street
South Norwalk, CT
866-6650

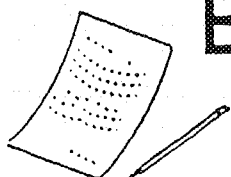
Schiavone & Sons
234 Universal Dr.
North Haven, CT 06473
contact: Joe Anstatia
777-2591

Schiavone - Bonomo Corp.
640 Canal St.
Stamford, CT 06902
contact: Tony Avani
324-3411

Shetucket Iron & Metal Co.
New Wharf
Norwich, CT 06360
contact: Walter Cedar
887-1681

Stanley Sack Co.
30 Barber Pond Rd.
Bloomfield, CT 06002
contact: Mark Sack
242-6228





BUSINESS RECYCLING

A DEP Recycling Program Fact Sheet



Waste Oil Recycling

What is Waste Oil?

"Waste Oil" is defined in the Mandatory Recycling Regulation (Section 22a-241b-1 of the Regulations of Connecticut State Agencies) as "crankcase oil that has been utilized in internal combustion engines."

How to Collect Waste Oil

If your business uses a small number of vehicles, service stations that change the oil in these vehicles should have provisions for recycling it. If your business uses and maintains a fleet of vehicles, you should establish a collection tank where you can safely store the oil before contacting a licensed transporter to haul it to a recycling facility. If you are only storing oil from your own business and do not accept oil from outside sources, you do not need a permit to install a collection tank, but the tank should be designed and managed in accordance with the guidelines listed below.

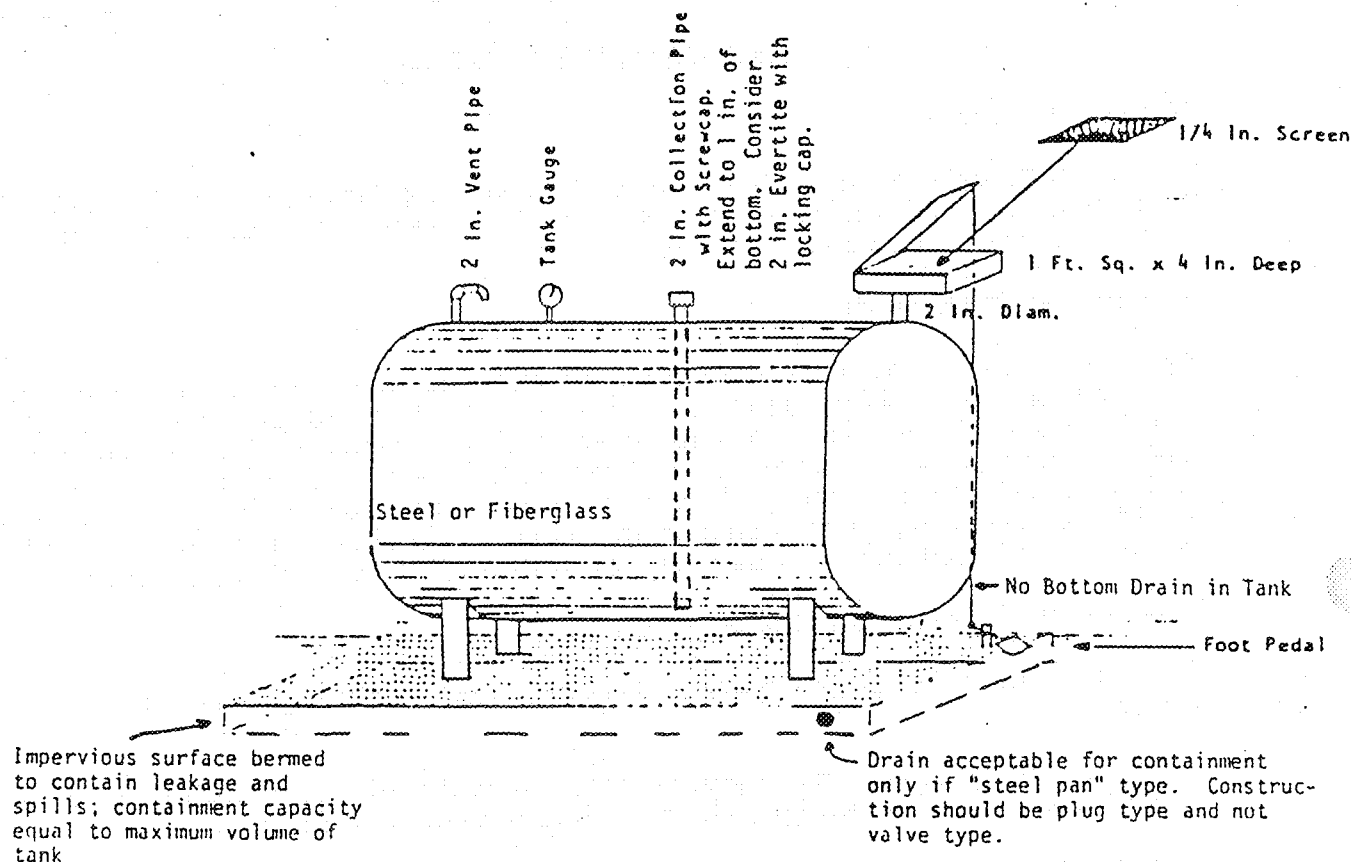
Tank Location, Design, and Management

Follow the guidelines below in siting, designing, and managing a used oil storage program:

- * Locate the tank in an above ground area that will minimize unauthorized access, vandalism, fire/explosion possibility, and release of oil to the environment.
- * Place the tank on an impervious base that provides for secondary containment equal in volume to the capacity of the storage tank.
- * Keep the tank locked when not in use.
- * Appoint one person to be responsible for monitoring oil storage and contacting a licensed waste oil transporter to haul the oil to a treatment facility for processing. This person should visually inspect the tank on a regular basis for leaks or malfunctions.
- * Do not mix gas, paint thinners, solvents, pesticides, anti-freeze, or other hazardous materials with oil.
- * Employees who handle used oil should be instructed about the proper operation and management of the oil storage area.
- * Use kitty litter, saw dust, or a commercially available product to absorb oil from minor spills.

- * Prepare a contingency plan describing the action that the tank manager and other personnel must take in response to vandalism, theft, fires, explosions, or release of oil to the environment. The plan must contain the names, addresses and phone numbers of, and describe the arrangement agreed to by local police and fire departments, contractors, and state and local emergency response teams in case of emergency. Federal law requires a spill prevention and countermeasures plan for any collection facility that has an aggregate storage of greater than 1,320 gallons or a single above-ground tank having a capacity greater than 660 gallons.

Typical Waste Oil Collection Tank Design

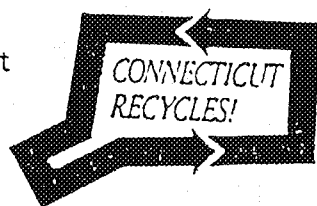


What To Do Once You Have Collected Waste Oil

You should contact a DEP-licensed commercial waste oil transporter to haul your waste oil to a treatment facility for processing. (See attached list entitled "Transporters permitted to haul waste oil and/or waste water soluble oil.") Used oil can be re-refined into high quality lubricating oil, reclaimed, treated, and used as feedstock in the manufacture of other products, or reprocessed as fuel oil.

In addition, service stations and other commercial establishments may burn the used oil that they generate (but not oil accepted from other sources). Oil burners must meet certain design standards and the oil must meet fuel specifications. Contact George Dews of the DEP at 566-4869 for information on the requirements for burning waste oil.

Prepared by Connecticut
DEP Recycling Program
January 1990



For more information
contact: Lynn Stoddard
at 566-8722, or George
Dews at 566-4869



CT DEPARTMENT OF ENVIRONMENTAL PROTECTION BUSINESS RECYCLING FACT SHEET



Waste Paper Recycling & Markets

Paper constitutes the largest single component of the municipal solid waste stream — over one third by weight. Therefore, paper recycling can significantly reduce the amount of waste that has to be disposed of in Connecticut. Although a certain level of waste paper recycling exists, additional waste paper can potentially be recovered in Connecticut.

Waste paper is traded on a world wide commodity basis through a network of brokers and exporters. The paper market has stringent quality requirements for its 51 grades of paper stock and another 33 specialty grades. The five categories of paper that are relevant to general business recycling programs are:

*Corrugated cardboard used to ship merchandise. For maximum value, contaminants such as styrofoam, packing materials, metal, wax, plastic coated cartons, and junk should be removed.

*Old newspaper as is delivered to a household. Newspaper must be clean, dry, and stored out of direct sunlight. Contaminants such as junk mail, plastic bags, telephone books, magazines, etc. should be removed.

*High grade office paper includes white typing, writing, and copy paper, white scratch paper, tab cards, index cards, and computer paper. Prohibited materials include carbon paper and NCR forms, blueprint paper, tape and glue, post-it notes, newspaper, corrugated, tissues, towels, and paper cups.

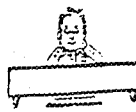
Sorted office paper is similar to high grade office paper but includes both colored and white paper.

Mixed office paper office paper recovered from offices and institutions in an unsorted, but clean form.

Waste paper recovered from mixed municipal waste generally does not meet industry specifications for use by paper mills in the United States. Best results are achieved through source separation programs. Paper markets fluctuate with supply and demand. When the supply of waste paper is plentiful, markets retain suppliers of high quality materials who can guarantee large tonnages of clean paper free of contaminants. Therefore, it is advisable to design source separation programs to maximize quality and quantity of waste paper.

The paper processors in Connecticut listed on the reverse side have facilities to sort, bale, and transport waste paper. Not all processors deal in all grades of waste paper. Paper brokers are in contact with mills and know the baling and quality specifications of paper mills. Brokers determine who is buying and selling each grade of paper and facilitate sales by arranging transportation and payment. The Connecticut paper brokers know the needs and specifications of the Connecticut mills as well as other northeast, U.S., and international users of waste paper.

* Paper that is required to be recycled from Connecticut businesses, schools, institutions, government offices, etc.



LIST OF CONNECTICUT WASTE PAPER PROCESSORS

The following list includes Connecticut waste paper processors that the Department is aware of. This is only a partial listing and by providing it to you, the Department of Environmental Protection is not recommending these companies over any others.

Advanced Recycling
283-285 White Street
Danbury, CT 06810
Contact: Ron Lupica
(203) 743-0405

Automated Materials
Handling, Inc.
655 Christian Lane
Kensington, CT 06037
Contact: Bob Patterson
(203) 223-3601

Capitol Recycling
123 Murphy Road
Hartford, CT 06114
(860) 249-2762

Cassone Paper Stock Co.
420 John Fitch Blvd.
South Windsor, CT
Contact: Victor Goldstein
(203) 528-9278
*high grades only

City Recycling, Inc.*
17 Cedar Street
Stamford, CT 06902
Contact: Rocky Possidento
(203) 324-4090

Connecticut Carting Company
P.O. Box 188
Bozrah, CT 06334
(860) 887-4811
*corrugated cardboard only

Davis Recycling Company
127 Orchard Street
Stamford, CT 06902
Contact: E.J. Donahue
(203) 348-1515

Ferraro Bros., Inc.
335 Central Ave.
Bridgeport, CT 06607
Contact: Bob Ross
(203) 335-5161

FCR Redemption, Inc.
1330 Honeyspot Rd Ext
Stratford, CT 06497
Contact: John Mastroianni
(203) 380-9001

Hanna Paper Recycling, Inc.
785 Sherman Avenue
Hamden, CT 06514
Contact: Dean Colovos
(203) 248-9368
*high grades only

Marcus Paper Co.
First Ave. & Wood St.
P.O. Box 8986
West Haven, CT 06532
Contact: Michael Zamkov
(203) 934-6351

New England Recycling Ctr
616 Atlantic St.
Stamford, CT 06902
Contact: Michael Tomasello
(203) 327-9778

Newhallville Recycling, Inc.
P.O. Box 3122
New Haven, CT 06515
Contact: Betsy Sneath
(203) 789-8775

Ostrinsky, Inc.
731 Parker St., P.O. Box 128
Manchester, CT 06040
Contact: Sandy
(203) 643-5879

Recycled Fibers of Connecticut
260 Tolland Turnpike
Manchester, CT 06040
Contact: Steve Caruso
(203) 647-7096

Recyclers Inc.
600 Nutmeg Road North
South Windsor, CT 06074
Contact: George Roberts
(860) 282-8282

RRS of Berlin
Facility: 655 Christian Lane
Kensington, CT 06037
Main Office: 36 Plains Rd.
Essex, CT 06426
Contact: Wendy Monaco
(203) 767-7057 ext 129

Stratford Baling
80 Garfield Ave.
Stratford, CT
Contact: Doris Bruno
(203) 377-7491

Trash Away
Deming Road
Berlin, CT 06037
Contact: Peter Lombardo
(203) 225-1206

United Paper
Stockhouse Rd.
Fitchville, CT 06334
Contact: Harold Kirstein
(203) 886-5511

Waste Management of CT
Wallingford Recycling Facility
346 Quinnipiack Street
Wallingford, CT 06492
Contact: Jerry Dugan
(203) 949-1716

Willimantic Waste Paper Co.
P.O. Box 4239
Willimantic, CT 06226
Contact: James DeVivo
(203) 423-4527

Prepared by the Connecticut DEP
Recycling Program 11/95

For more information contact:
Judy Belaval 424-3365



THE RESOURCE LOOP

A DEP Recycled Products Fact Sheet



CT Markets for Recycled Plastics

Many communities have added plastics to the list of items accepted in their curbside recycling programs. During fiscal year 1991-92, 157 municipalities reported collecting 1,039.16 tons of plastic containers (#1 PETE & #2 HDPE). For the same period some also accepted resins #3-7, for a total statewide of 119.38 tons. As with all recyclables, end markets to utilize the collected materials must be available if local programs are to continue. On the supply side, municipalities must be able to provide businesses with a contaminant-free feedstock to use as a raw material in their manufacturing process. The following listing includes those Connecticut companies involved in plastics recycling which the Department is aware of. However, it is not meant to represent a complete listing. In providing this information, the DEP is not recommending these companies over any others.

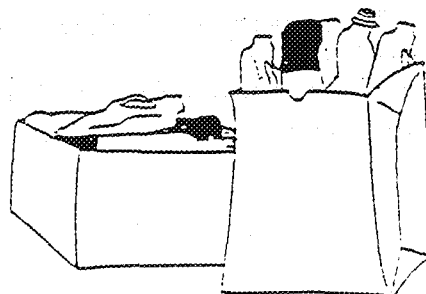
The following companies utilize recycled plastics in their manufacturing process:

DISCAS Recycled Products Division
567-1 South Leonard St.
Waterbury, CT 06708
Phone: 753-5147
Contact: Stephen DePaolo
Products: Office and school supplies,
manufactures custom products as well
Contact: Andy Benson.

Feedstock: primarily PP, HDPE & LDPE
but thermoplastics #2-7 have been utilized;
accepts both post-consumer and post-
industrial materials.

OBEX, Inc.
P.O. Box 1253
Stamford, CT 06901
Phone: 975-9094
Products: compost bins, landscape ties,
fenceposts, herb & accent planters, raised
garden bed sand box kits, park benches
and picnic tables.
Contact: Celeste M. Johnson.

Feedstock: comingled plastics, resins #1-7;
utilizes both post-consumer and post-
industrial materials.



The following companies have an office in Connecticut and may accept plastic scrap from CT companies or municipalities for processing at their facilities in other states:

Union Carbide Chemicals & Plastics Co.
39 Old Ridgebury Rd.
Danbury, CT 06817-0001
Phone: 794-3150 or 908-563-5949
Product: pelletized or flaked resins
Contacts: Morris Francis or Keith Raper

Feedstock: post-consumer resins only, resins #1PETE & #2HDPE (co-polymers, e.g. detergent and shampoo bottles and homo-polymers e.g. milk, juice and water jugs. Does not accept motor oil containers.)

Hafner Industries, Inc.
P.O. Box 3925, Amity Station
New Haven, CT 06525
Phone: 397-1562
Product: resins for resale to a fabricator
Contact: Ed Hafner

Feedstock: primarily post-industrial scrap including PVC, PET, HDPE, PUR, LDPE and PS. Will sometimes supplement with some post-consumer.

Plastics Service, Inc.
39 Dartmouth Rd.
Cos Cob, CT 06807
Phone: 869-5423
Contact: Howard W. Woodham

Feedstock: Post-industrial scrap only, may accept any of the thermoplastic resins depending on the value of the material and the quantity available.

H. Muelstein & Co, Inc.
P.O. Box 5445
Norwalk, CT 06856
Phone: 855-6064
Product: regrind resins
Contact: Michael Kaine.

Feedstock: primarily post-industrial scrap, accepts PS, PE, LDPE HDPE. May accept some clean, segregated post-consumer materials.

There are a number of publications which provide nationwide listings of companies that are involved in the processing, distribution, etc. of plastics and other recyclables. Some of these resources include:

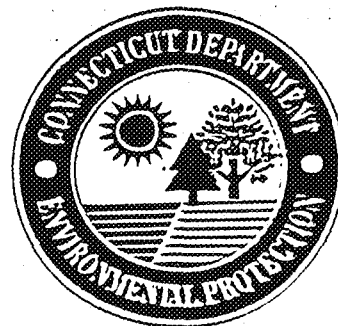
1. Scrap Plastics, Directory of U.S. & Canadian Scrap Plastics Processors & Buyers. Publisher Resource Recycling, Inc., P.O. Box 10540, Portland, Oregon 97210. Phone: 1-503-227-1319.

2. American Recycling Market, Directory/Reference Manual, published by Recoup, P.O. Box 577, Ogdensburg, N.Y. 13669. Phone: 1-800-267-0707

3. The Official Recycled Products Guide. Phone: 1-800-267-0707.

Prepared by Connecticut DEP Recycling Program. For more information contact Meg Enkler at 586-~~8222~~ September 1993.

424-3365



Propane Tank Disposal Information

Propane Tanks can be extremely hazardous and volatile. Unfortunately, getting rid of them has become a problem; due to their nature, very few places will accept them for disposal. Most towns do not have methods of their own for dealing with them. However, there are private companies that do dispose of them (empty or full), and most charge a small fee. While HazWaste Central does not endorse any particular company, the following is a list of Connecticut companies that do dispose of homeowners' propane tanks:

Branford

Taylor Rental Center
635 West Main Street
488-1644 \$5.00 Fee

Cheshire

Hines Hardware
231 Maple Avenue
272-4063 \$3.00 Fee

East Haven

Garganos Sales and Service
54 Hemingway Avenue
467-5903 \$5.00 Fee

Fairfield

AmeriGas
808 Boston Post Road
1-800-352-7177 \$5.00 Fee

Glastonbury

Beamers
210 Commerce Street
659-3515 \$5.00 Fee

Killingworth

AmeriGas
Routes 80 & 81
663-1636 \$5.00 Fee

Manchester

Northeast Tank Disposal
23 Electric Street
649-2755 \$3.00-\$5.00 Fee

Orange

Orange Town Refuse Center
ORANGE RESIDENTS ONLY!
Orange Center Road
795-5128 \$5.00 Fee

Stratford

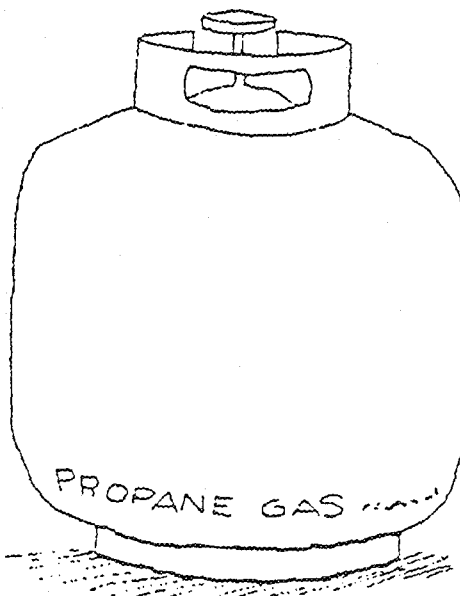
Connecticut Oxygen Corp.
120 South Road
377-1414 \$5.00 Fee

All-State Propane

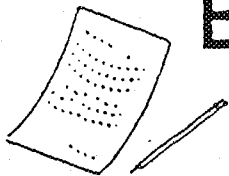
1075 Honeyspot Road
375-0400 \$5.00 Fee

Trumbull

Rural Gas Co.
7176 Main Street
261-3641 \$4.00 Fee



(BLANK)



BUSINESS RECYCLING



A DEP Recycling Program Fact Sheet

WOOD PALLET MARKETS

The following businesses have indicated that they accept wooden pallets or are listed under pallets in the yellow pages. Some businesses accept any grade and size because they make chips for fuel, while others reuse the pallets. To be reusable, the pallets must be heavy duty returnable construction and a commonly used size. This is only a partial listing and by providing it to you, the Department of Environmental Protection is not recommending these companies over any others.

Associated Refuse
Newtown, CT
Contact: Pat Caruso
telephone: 426-8870
* chips for fuel

Condordia Manufacturing Co.
Box 151
West Warwick, RI
Contact: Paul Boghossian
telephone: (401) 828-1100

Ecolab
John Barkala
New Jersey
telephone: (201) 636-2100
* reusable wood pallets
* only accepts specific sizes:
40 x 48, 40 x 40, 48 x 48

Interstate Pallet Co.
50 Eddy
New Haven, CT
Contact: Joe Nacca
telephone: 865-7543

NRS Carting
P.O. Box 783
So. Norwalk, CT 06856
Contact: George LeBlanc
telephone: 853-7570
* chips wood waste

Recycled Wood Products
RD #3 Box 548A
Hurffville, NJ
Contact: Steve Eisenhower
telephone: (609) 589-1501

Recycled Wood Products
25 Atlantic Ave.
Woburn, MA
telephone: (617) 933-3818

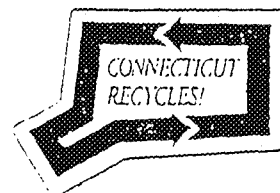
Reliable Pallet
127 Park Avenue
East Hartford, CT
telephone: 528-8753

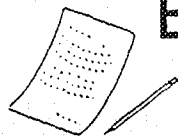
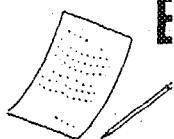
Southern Connecticut Pallet
Co.
417A Washington Ave.
North Haven, CT
telephone: 239-6622

Star Recycling Division
Allied Sanitation
Woodside/Queens, NY
Contact: Lou Vigliotti
telephone: (718) 497-8011
* chips for fuel

Willimantic Waste Co.
Willimantic, CT
telephone: 423-4527

Prepared by Connecticut
DEP Recycling Program
August 1988





BUSINESS RECYCLING

A DEP Recycling Program Fact Sheet



AUTOMOBILE BATTERY MARKETS

High-density laundry detergent
adequate
Statutes re-
code ident
the acronym

The reason
that the lig
relation to
following l
This is only
Environme

Eaglebrook
2600 W. R
Chicago, IL
(312) 638-
* bale cle
colored

M.A. Indus
303 Divide
Peachtree
contact: Ji
(404) 487-
* will acc
HDPE ai
* pay mo
separat
* will arr.
CT facili

Midwest P
811 Collins
Stoughton
contact: C
(608) 873-
* color se

The following scrap metal recyclers have indicated a willingness to accept automotive batteries. Generally, these recyclers pay for each battery; however, some recyclers merely accept batteries as a public service at no charge. Most recyclers pay a higher price for large quantities of batteries banded to pallets. Some recyclers only accept batteries if they are banded to pallets. Broken, damaged and leaking batteries are unacceptable and some dealers require batteries to be drained and dry. This is only a partial listing and by providing it to you, the Department of Environmental Protection is not recommending these companies over any others.

Alderman-Dow Iron & Metals
358 Chapel Street
New Haven, CT 06511
telephone: 562-1594

Calamari Brothers
20 Trumbull Street
New London, CT 06320
telephone: 442-5794

Joseph Freedman Co.
40 Albany Street
Springfield, MA 01101
telephone: 522-6395 or
(413) 781-4444

J.W. Green Co.
2676 South Washington St.
Plainville, CT 06062
telephone: 747-5514

S. Kasowitz & Sons
149 Front Ave.
West Haven, CT 06516
telephone: 932-5978

Kramer Scrap
Southern Ave.
Greenfield, MA 01301
telephone: (413) 774-3103

Lajoies
Meadow Street
South Norwalk, CT
telephone: 886-6650

MJ Metal Inc.
561 North Washington Ave.
Bridgeport, CT 06604
telephone: 334-3484

Ostrinsky, Inc.
731 Parker St.
Manchester, CT 06040
telephone: 643-5879

Rome Recycling Corp.
45 Olive Street
Hartford, CT
telephone: 951-3186

Rubino Brothers
560 Canal Street
Stamford, CT
telephone: 323-3195

Shetucket Iron &
Scrap Metal
Norwich, CT 06360
telephone: 887-1681

Suisman & Blumenthal
500 Flatbush Ave.
Hartford, CT 06106
telephone: 522-3123

M. Wilder & Sons
569 North Colony St.
Meriden, CT 06450
telephone: 235-4225

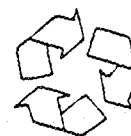
Prepared by Connecticut
DEP Recycling Program
December 1989

PRINTED ON RECYCLED PAPER





COMPOST CONNECTIONS



A CT DEP ORGANICS RECYCLING FACT SHEET

Stump, Brush, and Yard Trimmings Processors

This list can be used as a quick reference for commercial stump, brush, and yard trimmings processors as of December 1995. This is only a partial listing of facilities and/or processors. It includes only those facilities and processors the DEP Recycling Program is aware of. By providing this list to you, the Department does not recommend any of these companies over any others.

A & K Kus *(Service A&B) 271-1 Boston Post Road Old Lyme, CT 06371 Contact: Al Kus (203) 434-2245	S & H Industries *(Service A&B) 140 Middletown Avenue New Haven, CT 06513 Contact: Chris Stapleton (203) 777-5322
Crele Construction Corp. *(Service A) 1685 Saybrook Road Middletown, CT 06457 Contact: Leander Crete (203) 345-4503	Tremson Corporation *(Service B) 56 Lake Ave. Extension Danbury, Ct. 06810 Contact: George Tremblay (203) 743- 6606
Earthgro *(Service A&B) Route 207, P.O. Box 143 Lebanon, CT 06249 Contact: Joshua Nelson (203) 642-7591	Botticello Inc. *(Service B) 321 Olcott Street Manchester, CT 06040 Contact: Dennis Botticello (203) 649-3665
Galbo Recycling Facility *(Service B) P.O. Box 188 Bozrah, CT 06334 Contact: Mr. Fargo (203) 887-4811	Supreme Forest Products *(Service A&B) 494 Burlington Road Harwinton, CT 06791 Contact: Kevin Boucher (203) 485-0343
Greencycle of New England, Inc. *(Service A) 34 Judge Lane Newington, CT 06111 Contact: Chuck Meyer (203) 666-0080	Thompson Farm Brush Processing Facility *(Service A) Route 140 Ellington, CT 06034 Contact: Rachael deRham (203) 677-2292
Wood Waste, Inc. *(Service B) 1075 Washington Street Peekskill, NY 10566 Contact: Barney Zipkin (914) 736-3357	Twin Oaks Reduction & Recycling *(Service B) 140 Bradley Street Woodbridge, CT 06525 Contact: Dick Peterson (203) 767-2296
Northeastern Landclearing *(Service B) 1675 Saybrook Road Middletown, CT 06457 Contact: Paul (203) 345-3223	Unnamed *(Service A) Plainfield Pike / Route 14A Sterling, CT 06377 Contact: Robert Birmingham (203) 536-2681

* Service A operates a permitted facility (general permit or individual permit)

* Service B operates a mobile commercial processing service

Please see the reverse side for additional information.

Landclearing Debris and Yard Trimmings Management

Landscaping, storm events, and the clearing of land for development generate untreated organic materials (eg. brush, stumps and yard trimmings) which can be source separated and reused. The DEP promotes the chipping and reuse of landclearing debris and yard waste as an efficient use of natural resources and to reduce disposal needs at landfills and resource recovery facilities. Chipped landclearing debris and yard waste can be used in landscaping substrates, compost bulking agents, soil amendments, and in temporary land stabilization projects in a manner that poses no threat to surface or ground waters of the state.

The DEP cautions that only untreated wood is suitable for such reuse. Treated wood such as plywood; furniture and furnishing; wood waste from construction, renovation and demolition; pressure treated timber; painted or stained wood and any other surface treated wood should **not** be chipped and reused directly on land or used as a compost bulking agent. Treated wood may contain creosote, lead, acrylic, chromium, pentachlorophenol, phenol-formaldehyde resins and other known carcinogens and ground water contaminants. Extensive test data on treated wood show lead and other contaminants to exceed allowable EPA levels. These pollutants can leach into the ground water or be ingested by children, animals, and adults. For these reasons, chipped treated wood is not suitable for use in compost, mulch, or land application such as highway grading and beautification projects. **Treated wood should only be disposed at appropriate solid waste disposal facilities.**

To facilitate the chipping of untreated wood for reuse, the Connecticut DEP regulates certain recycling facilities under a general permit (effective May 26, 1993). Within the operating requirements of the general permit, "single item recycling facilities" may process and recycle brush. A "single item recycling facility" is any "solid waste facility where a single category of recyclable solid waste is processed within the legal boundaries of the property on which such facility is located." "Brush" is defined as "tree stumps and cut or broken branches and shrubs."

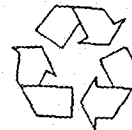
In addition to other requirements that apply to all single item recycling facilities, the following requirements apply specifically to those facilities that collect, store and process brush:

1. No more than 2500 cubic yards of unprocessed brush may accumulate at the facility at any one time. The maximum height of an unprocessed brush pile shall not exceed 25 feet.
2. Once the maximum volume of 2500 cubic yards of unprocessed brush accumulates, the brush must be processed.
3. No more than 500 cubic yards of processed brush may be stored at the facility at one time. The maximum height of the processed brush pile shall not exceed 15 feet.
4. Noise, dust, fumes, smoke, vibrations, and odors shall not exceed background levels when measured at any of the facility's property boundaries.

Prepared by the CT DEP Recycling Program, 79 Elm Street, Hartford, CT 06106. For more information, call 424-3365.

Revised January 1996

Printed on Recycled Paper



COMPOST CONNECTIONS

A CT DEP ORGANICS RECYCLING FACT SHEET

Private Leaf Composting Facilities Registered with the CT DEP Recycling Program Revised November 1, 1994

Town	Name, Location and Phone #	Contact, Name and Address	Volume	Material
Berlin	Silver Lake Recycling Norton Lane (203) 828-8929	Steven Walowski 179 Southington Rd. Kensington, CT 06037	42,000 cubic yards per year	Leaf composting facility
East Canaan	Freunds Farm Rte 44 (203) 824-0770	Matt and Ben Freund Rte 44 East Canaan, CT 06716	3,000 cubic yards per year	Leaf composting facility
Easton	Snows Farm 550 Sport Hill Rd. (203) 261-2020	Philip Snow 550 Sport Hill Rd. Easton CT 06612	36,000 cubic yards per year	Leaf composting facility
Ellington	Thompson Family Farm Compost Facility Rte 140 (203) 870-4237	John deRham 34 Judge Lane Newington, CT 06111	54,000 cubic yards per year	Leaf composting facility. Brush processing available.
Lebanon	Earthgro Rte 207 (203) 642-7181	Paul Sellew P.O. Box 143 Lebanon, CT 06249	120,000 cubic yards per year	Leaf composting facility. Brush, grass and other organics processing available.
Milford	Grillo Organics Inc. 1183 Oronoque Rd. (203) 261-1502	J. Michael Grillo 8 Burton Ave Trumbull, CT 06611	14,864 cubic yards per year	Leaf composting facility. Brush processing available.
North Canaan	Landtech Inc. 40 Allyndale Rd. (203) 738-9753	Gilbert Fredsall P.O. Box 883 Winsted, CT 06098	12,000 cubic yards per year	Leaf composting facility. Brush processing available.
North Haven	Borrelli & Sons Inc. 95 Warner Rd. (203) 239-1930	Lewis Borrelli 95 Warner Rd North Haven, CT 06073	12,580 cubic yards per year	Leaf composting facility
Wolcott	Echo Farms Todd Rd. (203) 879-2731	Bill Gniazdowski 10 Kenea Ave. Wolcott, CT 06716	18,000 cubic yards per year	Leaf composting facility

See Reverse side for more information

General Information

Leaves are a mandatory recyclable item pursuant to Section 22a-241b-1 of the Regulations of Connecticut State Agencies. Because of this designation, 82 leaf composting facilities are now registered in the state of Connecticut, most of which are municipally owned and used to recycle town generated leaves.

The facilities listed in this fact sheet represent only *privately* owned and operated facilities that are registered with the Connecticut DEP Recycling Program to accept leaves for composting. They are known to have been in operation as of November 1, 1994 and are considered regional sites because they accept leaves from several different sources. Private sites which are inactive or which have an agreement to take leaves only from specific sources have not been included on this list.

Each registered facility has been designed to accept a certain volume of leaves which must not be exceeded. In most cases a tip fee is charged and conditions are placed on how and when leaves are accepted. *Therefore, it is very important that the owner or operator of any leaf composting facility be contacted for information concerning their requirements prior to delivering leaves.*

This is only a partial listing of leaf composting facilities identifying private leaf composting facilities in Connecticut. By providing this listing to you, the Connecticut Department of Environmental Protection is not recommending these facilities over any others. For additional information contact the Connecticut Department of Environmental Protection, Recycling Program at (203) 424-3365.

Definitions

"Brush" means tree stumps and broken branches and shrubs. [General Permit to Construct and Operate Certain Recycling Facilities, effective May 26, 1993, as authorized by 22a-208a(r) of the CGS.]

"Leaf" or "Leaves" means the foliage of trees. [Section 22a-208i(a)-1 of the RCSA.]

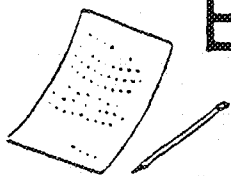
"Leaf Composting" or "Composting of Leaves" means the accelerated aerobic biodegradation and stabilization of leaves under controlled conditions. [Section 22a-208i(a)-1 of the RCSA.]

"Leaf Composting facility" means land, including structures and appurtenances thereon, other than home composting areas, where leaf composting takes place. [Section 22a-208i(a)-1 of the RCSA.]

Prepared by the CT DEP Recycling Program, 79 Elm Street, Hartford, CT 06106. For more information, call 424-3365

Revised 11-1-94





BUSINESS RECYCLING



A DEP Recycling Program Fact Sheet

Business Recycling What "Provide for Separation" Means

If it sounds too good to be true...it probably is.

Some vendors of collection and processing services are suggesting that the phrase "make provision for the separation" found in Section 1(c) of Public Act 90-220 means that nonresidential waste generators do not need to do any presegregation of recyclable materials prior to their collection. In other words, "just keep putting out your trash and we'll take care of it." They assert that nonresidential solid waste can be aggregated and collected as it has always been and then taken to a solid waste facility where the designated recyclables will be hand and/or mechanically separated from the other waste materials.

Recyclable Materials May Not Be Contaminated

The statutes, as well as common sense, indicate that some presegregation must occur by nonresidential waste generators prior to collection. The presegregation will prevent contamination of the recyclable materials that would make them unfit for recycling. For example, if cafeteria or other wet wastes are collected mixed with white paper or corrugated, the paper materials will be contaminated and unfit for recycling. Similarly, if recyclable glass food containers are mixed with white paper and cardboard and the glass breaks and becomes enmeshed in the paper, the paper will be unfit for recycling.

Some Mixing of Certain Materials Is Allowed

This does not mean that nonresidences must presegregate all of their recyclables. It is acceptable to mix together certain recyclables and nonrecyclables that do not contaminate one another. For instance, paper waste, clean plastic waste and clean wood waste could be aggregated for collection by the generator and then separated at a volume reduction facility without significant contamination of the recyclables. The generator would probably pay a fee for this service rather than receiving revenue for presegregated materials, but space and quantity limitations might make this the best approach for generators of small quantities of recyclables.

The clearest legal statement of the need for some level of presegregation is found in Section 22a-259(10) of the Connecticut General Statutes, which states: "It is the intent of this (chapter) to promote the presegregation of recoverable or recyclable materials before they become mixed and included in the waste stream...."

Several sections of Public Act 90-220 implement the policy of Section 22a-259(10): Section 1(c) states: "On and after January 1, 1991, (1) each person who generates solid waste from residential property shall ... separate from

other solid waste the items designated for recycling pursuant to subsection (a) of this section and (2) every other person who generates solid waste shall ... make provision for the separation from other solid waste of the items designated for recycling pursuant to Subsection (a) of this section." If the system for "providing separation" results in the production of contaminated recyclables which have to be sent to a landfill or energy recovery facility, the intent of the law to separate the designated items for recycling is not met.

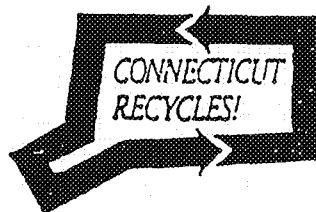
Enforcement Provisions

Other sections of Public Act 90-220 impose enforcement responsibilities on municipalities, haulers and disposal facilities, all aimed at ensuring that the designated recyclables do not end up at a disposal facility, but are instead recycled. Section 2(c) requires municipalities to pass ordinances or adopt other legal measures to enforce the separation requirements for residential and nonresidential generators and to ensure that collectors assist the municipalities in identifying those who mix recyclables with solid waste.

Other sections require collectors of solid waste (4a) to inform the municipality if any generator mixes recyclable materials with solid waste, and owners or operators of resource recovery and other solid waste facilities to identify loads of incoming waste with significant quantities of recyclables and report them to the hauler and municipality so that action can be taken.

Enforcement penalties are established in Public Act 90-249 to be imposed on those who do not comply with the recycling mandates. The enforcement measures and penalties provided for in Public Acts 90-220 and 90-249 do not distinguish between residential and nonresidential generators of solid waste. Consequently, these sections of the law require sufficient separation to prevent contamination of designated recyclables.

Prepared by Connecticut
DEP Recycling Program
January, 1991



For more information,
contact: 424-3365

RECYCLING REGION LISTING BY TOWNS

CAPITOL/MID-CONNECTICUT

Andover
Canton
Cromwell
Durham
East Granby
East Hampton
East Hartford
East Windsor
Ellington
Enfield
Farmington
Glastonbury
Granby
Haddam
Hartford
Hebron
Marlborough
Middlefield
Middletown
Newington
Portland
Rocky Hill
Simsbury
South Windsor
Stafford
Suffield
Vernon
West Hartford
Wethersfield
Windsor Locks

CENTRAL NAUGATUCK

Beacon Falls
Bethlehem
Middlebury
Naugatuck
Oxford
Southbury
Thomaston
Watertown
Woodbury

ESTUARY

Chester
Clinton
Deep River
Essex

Killingworth
Old Saybrook
Westbrook

HOUSATONIC

Bethel
Bridgewater
Brookfield
Danbury
Kent
New Fairfield
New Milford
Newtown
Roxbury
Sherman

LITCHFIELD HILLS

Barkhamsted
Canaan
Colebrook
Cornwall
Goshen
Harwinton
Litchfield
New Hartford
Norfolk
North Canaan
Salisbury
Sharon
Torrington
Winchester

MID-NORTHEAST

Ashford
Bolton
Chaplin
Columbia
Coventry
Eastford
Mansfield
Tolland
Union
Willington
Windham

NORTHEAST

Brooklyn
Canterbury
Griswold
Hampton

Killingly
Plainfield
Pomfret
Putnam
Scotland
Sterling
Thompson
Woodstock

SOUTH CENTRAL

Ansonia
Derby
Hamden
New Haven
North Haven

SOUTHEAST

Bozrah
Branford
Colchester
East Lyme
Franklin
Groton
Guilford
Ledyard
Lyme
Madison
Montville
New London
North Stonington
Norwich
Preston
Salem
Sprague
Stonington
Voluntown
Waterford

SOUTHWEST

Bridgeport
Darien
East Haven
Easton
Fairfield
Greenwich
Milford
Monroe
New Canaan
Norwalk
Orange

Shelton
Stamford
Stratford
Trumbull
Weston
Westport
Wilton
Woodbridge

TUNXIS

Berlin
Bristol
Burlington
Meriden
Morris
New Britain
Plainville
Plymouth
Prospect
Southington
Warren
Washington
Wolcott

INDIVIDUAL TOWN PROGRAMS

Avon
Bloomfield
East Haddam
Hartland
Lebanon
Lisbon
Manchester
Redding
Ridgefield
Somers
Wallingford
Waterbury
Windsor

UNDECIDED

Bethany
Cheshire
North Branford
Old Lyme
Seymour
West Haven

REGIONAL RECYCLING COORDINATORS/CONTACTS

Recycling: *Kathy Dube
CAPITOL Region Council of Govts.
221 Main Street
Hartford, CT 06106
522-2217/Fax:724-1274

Recycling: *Jeff Barnes
CENTRAL NAUGATUCK VALLEY Council
of Governments
20 East Main Street
Waterbury, CT 06702
757-0535/Fax:756-7688

Recycling: *David B. Sulkis
CONNECTICUT RIVER ESTUARY
Regional Planning Agency
P.O. Box 778
Old Saybrook, CT 06475
388-3497/Fax 395-1404

Recycling: *Linda Szczygiel
HOUSATONIC Resources Recov. Auth.
Old Town Hall, Route 25 & 133
Brookfield, CT 06804
775-6256/Fax:740-9167

Recycling: *Edward Donovan
LITCHFIELD HILLS COUNCIL
of Elected Officials
42 North St., Town Hall
Goshen, CT 06756
491-9884/Fax:491-3729

Recycling: *Tim Wentzell
MID-NORTHEAST Regional Recycling
Operating Committee
630 Governor's Highway
South Windsor, CT 06074
289-2296/Fax:289-2296

Recycling: *Winston Averill
NORTHEASTERN CT Regional RRA
P.O. Box 198
Brooklyn, CT 06234
774-1253/Fax:779-2056

Recycling: *Heather Gilbert
SOUTH CENTRAL Reg. Council
of Governments
23 Peck Street
North Haven, CT 06473
234-7555/Fax:234-9850

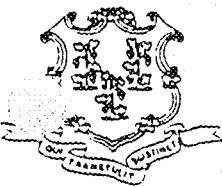
Recycling: *Toby Goodrich
SOUTH EASTERN CT Regional RRA
132 Military Highway
Preston, CT 06365
887-6368/Fax:885-0191

Recycling: *Valerie Knight
SOUTHWEST CT Reg. Recyc.
Operating Committee
Dept. of Public Works
125 East Avenue
Norwalk, CT 06856
852-0103/Fax:857-0143

Recycling: *Mark Bobman
TUNXIS Recycling Operating
Committee
75 Twining Street
Bristol, CT 06010
585-0419/225-9811; Fax:585-9875

* Indicates regional coordinator

Prepared by Connecticut DEP
Recycling Program
December 1992



STATE OF CONNECTICUT
DEPARTMENT OF ENVIRONMENTAL PROTECTION



CONNECTICUT IPC
RECYCLABLES MARKETING CONTACTS
(for recycling regions receiving state grant funds)

Regional IPC Market Contact	Member Region(s)	Items Processed
Jennifer Pugh Connecticut Resource Recovery Authority 179 Allyn Street Hartford, CT 06103 Phone: (203) 549-1751	Kathy Dube, Recycling Coordinator CAPITOL Region Council of Govts. 221 Main Street Hartford, CT 06106 522-2217/ Fax:724-1274 Jill Schuerle, Recycling Coordinator Central Naugatuck Valley Council of Govts. 20 East Main Street Waterbury, CT 06702 757-0535/Fax:756-7688 Greg Smith, Recycling Coordinator Connecticut River Estuary Regional Planning Agency P.O. Box 778 Old Saybrook, CT 06475 388-3497/Fax:395-1404 Ed Donovan, Recycling Coordinator Litchfield Hills Council of Elected Officials 42 North St., Town Hall Goshen, CT 06756 491-9884/Fax:491-3729	glass, metal food containers, plastics, newspaper, corrugated, will begin magazines spring 95.

Regional IPC Market Contact	Member Region(s)	Items Processed
Paul DeNardo Recycling Technologies Inc. 307 White Street Danbury, CT 06810 Phone (203) 797-0378	Bob Palmer, Recycling Coordinator Housatonic Resources Recovery Authority Old Town Rd., Routes 25 & 133 Brookfield Ctr., CT 06805 775-6256/Fax:740-9167	glass, metal food containers, plastic, newspaper, corrugated, starting magazines & etc.
Winston Averill (NE) Phone (203) 774-1253 Tim Wentzell (Mid-NE) Phone (203) 289-2296 NO IPC	<div> <div> Winston Averill, Recy Coord NE CT Regl RRA Old Town Rd. Rte 25 Brooklyn, CT 06234 Phone 774-1253 Fax:779-2056 </div> <div> Tim Wentzell Recy Coord Mid- NE Reg ROC 630 Governor's Hwy. S. Windsor, CT 06074 Phone 289-2296 Fax: 289-8121 </div> </div>	glass, metal food containers, plastics, newspaper, corrugated, some towns recycle additional material, i.e. magazines, junkmail, a.c. freeze, etc.
Elizabeth H. Karter Resource Recovery Systems, Inc. 36 Plains Rd. Essex, CT 06426 Phone (203) 767-7057	Diane Rhodes, Recycling Coordinator SE CT Regional RRA 132 Military Highway Preston, CT 06365 887-6368/Fax:885-0191	glass, metal food containers, plastics, drink boxes, cardboard drink containers
Elizabeth H. Karter Resource Recovery Systems, Inc. 36 Plains Rd. Essex, CT 06426 Phone (203) 767-7057	Mark Bobman, Recycling Coordinator Tunxis Recycling Operating Committee 75 Twinning Street Bristol, CT 06010 585-0419/Fax:585-9875	glass, metal food containers, newspaper, corrugated
Sean Duffy Fairfield County Recycling 1300 Honeyspot Rd Ext. Stratford, CT 06497 Phone (203) 378-2179	Valerie Knight-DiGangi, Regional Manager SW CT Regional ROC Dept. of Public Works 1410 Honey Spot Rd. Ext. Startford, CT 06497 381-9571 or (800)455-9571 Fax:377-1930	glass, metal food containers, plastics, newspaper, corrugated

Prepared by CT DEP Recycling Program 7/95 (ipc.tbl; Feb 94 yellow disc)

Appendix I

Pollution Prevention
Technical Assistance Programs

**Pollution Prevention
Technical Assistance Programs**

Pollution Prevention Information Clearinghouse (PPIC)

U.S. Environmental Protection Agency

PM 211-A

401 M Street, SW

Washington, D.C. 20460

202-260-1023

The PPIC has pollution prevention information, a telephone reference and referral system, and a computerized information exchange system.

Pollution Prevention Information Exchange System (PIES)

EPA Systems Development Center

200 N. Glebe Road

Arlington, VA 22203

703-506-1025 (modem)

PIES is a free, 24 hour accessible network consisting of management centers, bulletins, technical data bases, case studies, and issue specific conference listings.

Federal Agency Mini-Exchange (FAME)

EPA Systems Development Center

200 N. Glebe Road

Arlington, VA 22203

703-506-1025 (modem)

FAME is a database on the PIES that provides information on pollution prevention/recycling efforts at federal facilities.

**Defense Environmental Network and Information Exchange
(DENIX)**

DECIM Office

Hoffman 2, Room 12S49

200 Stovall Street

Alexandria, VA 22332

1-800-642-3332

703-325-0002

DENIX is a DOD communications platform for the dissemination and exchange of environmental information across all DOD components.

Center for Environmental Research Information (CERI)
Dorothy Williams
U.S. Environmental Protection Agency
Center for Environmental Research Information
26 West Martin Luther King Drive
Cincinnati, OH 45268
513-569-7562

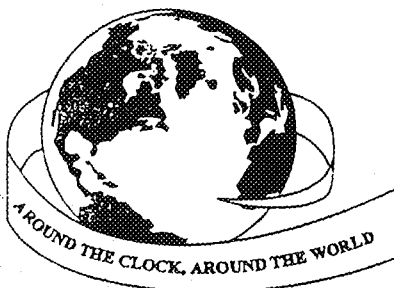
CERI serves as the exchange of scientific and technical information produced by EPA in brochures, capsule and summary reports, handbooks, newsletters, project reports, and manuals.

Appendix J

Defense Logistic Agency Centers

December 1995

*Chemical Alternatives, Recyclers,
Aircraft Cleaners and more . . .*



DEFENSE
LOGISTICS
AGENCY

2nd Edition

*This catalog has been expanded to include products
from throughout the Defense Logistics Agency.*

DLA offers more

Environmental Products

The Defense Logistics Agency has hundreds of environmental products in its supply system ranging from citrus-based degreasers and complete antifreeze recycling systems to natural resource conservation products.

Purchasing these products can help you meet your organization's goals in:

- Reducing hazardous waste
- Eliminating use of ozone-depleting chemicals
- Protecting your employees, and
- Saving money

Many different units of issue are available to

help ensure you buy only what you need. Most of these items can be shipped directly from the supplier to your location.

DLA has done the cataloging, item management and contracting for you and can ensure you receive the benefit of its purchasing power.

This catalog is divided into broad headings describing the types of products to assist you in selecting possible alternatives to hazardous chemicals or processes in use now.

For more information about environmental products, check the guide in this catalog and then call one of DLA's representatives today!

How do I order from DLA?

Preferred methods:

Automated systems using MILSTRIP/FEDSTRIP
or
GSA's Muffin System

Alternative methods:

Contact the appropriate inventory control point via:

FAX

Mail

ESEX

Internet home page address:
<http://www.dscl.dla.mil>

New environmental products are identified daily

DLA strives to meet its customers' needs by staying abreast of the latest technology and making new products available through the federal supply system. If you know of products which would be appropriate for inclusion in future editions, we want to hear from you!

If the product falls under one of the categories in this catalog, contact the technical or marketing representative at the appropriate supply center shown on pages *ii* and *iii*. In all other cases, contact the Defense Logistics Services Center, Battle Creek, Mich.

616-961-4958 or 5729 (Commercial)

932-4958 or 5729 (DSN)

932-5305 (FAX)

Reminder: Check with the process owner, engineering support activity, etc., before substituting an environmental product for a specified hazardous item.

S9E

Defense Electronics Supply Center
1507 Wilmington Pike
Dayton, Ohio 45444-5160

For more information on: Miscellaneous energy-saving
devices for ADP equipment

Call:

Marketing 1-800-643-8825 ... DSN 986-6425 FAX 1-800-643-8827

S9F

Defense Fuel Supply Center
8725 John J. Kingman Road, Suite 2941
Fort Belvoir, Va. 22060-6221

For more information on: Bulk petroleum, oils and lubricants

Call:

Chemist 703-767-8358 ... DSN 427-8358 FAX 703-767-8366

Item Manager 703-767-9262 ... DSN 427-9262 FAX 703-767-9269

Marketing 703-767-8377 ... DSN 427-8377 FAX 703-767-8366

S9I

Defense Industrial Supply Center
700 Robbins Avenue
Philadelphia, Pa. 19111-5096

For more information on: Gaskets, fasteners, packing

Call

Technical Support 215-697-0930 ... DSN 442-0930 ... E-Mail srigefsky@disc.dla.mil

215-697-4534 ... DSN 442-6671 ... E-Mail kmaute@disc.dla.mil

Material Branch 215-697-1172 ... DSN 442-1172

Many commodities managed by the Defense Industrial Supply Center contain materials hazardous to personnel, the environment, or both. These materials include asbestos, cadmium and ozone depleting substances. They may be contained in the products the center manages and procures or in the manufacturing or testing process for products it buys.

DISC has an aggressive program to develop and secure Service approval for replacements for many of its commodities which formerly utilized hazardous materials. Once a replacement has been developed and approved by the Service, the center no longer offers the hazardous stock number to its customers.

An Asbestos Bulletin Board System is in place which will assist you in identifying DISC-managed national stock numbers that contain asbestos. Non-asbestos replacements are listed with the asbestos parts. Anyone with a computer and modem can access the system at 215-697-2340 or DSN 442-2340.

DISC will continue its program to develop additional non-hazardous replacements with the intent of replacing all hazardous related commodities with those that do not use hazardous materials in either the product or its manufacturing process.

S9C

Defense Supply Center Columbus
P. O. Box 3990
Columbus, Ohio 43216-5000

For more information on: Pest management equipment
Natural resource conservation products
Firefighting equipment

Call:

Hazardous Materials

Minimization Program 614-692-4249 . . . DSN 850-4249 FAX 614-692-1753
Item Manager 614-692-2860 . . . DSN 850-2860 FAX 614-692-2862
Marketing 614-692-1858 . . . DSN 850-1858 FAX 614-692-1293

S9G

Defense Supply Center Richmond
8000 Jefferson Davis Highway
Richmond, Va. 23297-5100

For more information on:

Aqueous cleaners/degreasers	Spill control products	Marine cleaning compounds
Semi-aqueous cleaners/degreasers	Skin protection barrier products	Remanufactured/recycled laser printer toner cartridges
Hydrocarbon-based or other cleaners/degreasers	Cold climate applications	Packaged petroleum, oils, and lubricants
Aircraft cleaning compounds	Support equipment/recycling products	Pesticides

Call:

Hazardous Technical

Information Services 1-800-848-4847 . . . DSN 695-5168 email gss5089@dscr.dla.mil

Chemicals

Technical 804-279-3995 . . . DSN 695-3995 FAX DSN 695-6008
Item Manager 804-279-3540 . . . DSN 695-3540 FAX DSN 695-4403

Petroleum Products

Technical 804-279-4257 . . . DSN 695-4257 FAX DSN 695-6418
Item Manager 804-279-3024 . . . DSN 695-3024 FAX DSN 695-3971

Marketing 1-800-352-2852 . . . DSN 695-6054 FAX 1-800-352-3291
FAX DSN 685-5695

Appendix K

Executive Order 12856

Federal Register

Vol. 58, No. 150

Friday, August 6, 1993

Presidential Documents

Title 3—

Executive Order 12856 of August 3, 1993

The President

Federal Compliance With Right-to-Know Laws and Pollution Prevention Requirements

WHEREAS, the Emergency Planning and Community Right-to-Know Act of 1986 (42 U.S.C. 11001-11050) (EPCRA) established programs to provide the public with important information on the hazardous and toxic chemicals in their communities, and established emergency planning and notification requirements to protect the public in the event of a release of extremely hazardous substances;

WHEREAS, the Federal Government should be a good neighbor to local communities by becoming a leader in providing information to the public concerning toxic and hazardous chemicals and extremely hazardous substances at Federal facilities, and in planning for and preventing harm to the public through the planned or unplanned releases of chemicals;

WHEREAS, the Pollution Prevention Act of 1990 (42 U.S.C. 13101-13109) (PPA) established that it is the national policy of the United States that whenever feasible, pollution should be prevented or reduced at the source, that pollution that cannot be prevented should be recycled in an environmentally safe manner; that pollution that cannot be prevented or recycled should be treated in an environmentally safe manner; and that disposal or other release into the environment should be employed only as a last resort and should be conducted in an environmentally safe manner;

WHEREAS, the PPA required the Administrator of the Environmental Protection Agency (EPA) to promote source reduction practices in other agencies;

WHEREAS, the Federal Government should become a leader in the field of pollution prevention through the management of its facilities, its acquisition practices, and in supporting the development of innovative pollution prevention programs and technologies;

WHEREAS, the environmental, energy, and economic benefits of energy and water use reductions are very significant; the scope of innovative pollution prevention programs must be broad to adequately address the highest-risk environmental problems and to take full advantage of technological opportunities in sectors other than industrial manufacturing; the Energy Policy Act of 1992 (Public Law 102-486 of October 24, 1992) requires the Secretary of Energy to work with other Federal agencies to significantly reduce the use of energy and reduce the related environmental impacts by promoting use of energy efficiency and renewable energy technologies; and

WHEREAS, as the largest single consumer in the Nation, the Federal Government has the opportunity to realize significant economic as well as environmental benefits of pollution prevention;

AND IN ORDER TO:

Ensure that all Federal agencies conduct their facility management and acquisition activities so that, to the maximum extent practicable, the quantity of toxic chemicals entering any wastestream, including any releases to the environment, is reduced as expeditiously as possible through source reduction; that waste that is generated is recycled to the maximum extent practicable; and that any wastes remaining are stored, treated or disposed of in a manner protective of public health and the environment;

Require Federal agencies to report in a public manner toxic chemicals entering any wastestream from their facilities, including any releases to the environment, and to improve local emergency planning, response, and accident notification; and

Help encourage markets for clean technologies and safe alternatives to extremely hazardous substances or toxic chemicals through revisions to specifications and standards, the acquisition and procurement process, and the testing of innovative pollution prevention technologies at Federal facilities or in acquisitions;

NOW THEREFORE, by the authority vested in me as President by the Constitution and the laws of the United States of America, including the EPCRA, the PPA, and section 301 of title 5, United States Code, It is hereby ordered as follows:

Section 1. Applicability.

1-101. As delineated below, the head of each Federal agency is responsible for ensuring that all necessary actions are taken for the prevention of pollution with respect to that agency's activities and facilities, and for ensuring that agency's compliance with pollution prevention and emergency planning and community right-to-know provisions established pursuant to all implementing regulations issued pursuant to EPCRA and PPA.

1-102. Except as otherwise noted, this order is applicable to all Federal agencies that either own or operate a "facility" as that term is defined in section 329(4) of EPCRA, if such facility meets the threshold requirements set forth in EPCRA for compliance as modified by section 3-304(b) of this order ("covered facilities"). Except as provided in section 1-103 and section 1-104 below, each Federal agency must apply all of the provisions of this order to each of its covered facilities, including those facilities which are subject, independent of this order, to the provisions of EPCRA and PPA (e.g., certain Government-owned/contractor-operated facilities (GOCO's), for chemicals meeting EPCRA thresholds). This order does not apply to Federal agency facilities outside the customs territory of the United States, such as United States diplomatic and consular missions abroad.

1-103. Nothing in this order alters the obligations which GOCO's and Government corporation facilities have under EPCRA and PPA independent of this order or subjects such facilities to EPCRA or PPA if they are otherwise included. However, consistent with section 1-104 below, each Federal agency shall include the releases and transfers from all such facilities when meeting all of the Federal agency's responsibilities under this order.

1-104. To facilitate compliance with this order, each Federal agency shall provide, in all future contracts between the agency and its relevant contractors, for the contractor to supply to the Federal agency all information the Federal agency deems necessary for it to comply with this order. In addition, to the extent that compliance with this order is made more difficult due to lack of information from existing contractors, Federal agencies shall take practical steps to obtain the information needed to comply with this order from such contractors.

Sec. 2-2. Definitions.

2-201. All definitions found in EPCRA and PPA and implementing regulations are incorporated in this order by reference, with the following exception: for the purposes of this order, the term "person", as defined in section 329(7) of EPCRA, also includes Federal agencies.

2-202. *Federal agency* means an Executive agency, as defined in 5 U.S.C. 105. For the purpose of this order, military departments, as defined in 5 U.S.C. 102, are covered under the auspices of the Department of Defense.

2-203. *Pollution Prevention* means "source reduction," as defined in the PPA, and other practices that reduce or eliminate the creation of pollutants through: (a) increased efficiency in the use of raw materials, energy, water, or other resources; or (b) protection of natural resources by conservation.

2-204. *GOCO* means a Government-owned/contractor-operated facility which is owned by the Federal Government but all or portions of which are operated by private contractors.

2-205. *Administrator* means the Administrator of the EPA.

2-206. *Toxic Chemical* means a substance on the list described in section 313(c) of EPCRA.

2-207. *Toxic Pollutants*. For the purposes of section 3-302(a) of this order, the term "toxic pollutants" shall include, but is not necessarily limited to, those chemicals at a Federal facility subject to the provisions of section 313 of EPCRA as of December 1, 1993. Federal agencies also may choose to include releases and transfers of other chemicals, such as "extremely hazardous chemicals" as defined in section 329(3) of EPCRA, hazardous wastes as defined under the Resource Conservation and Recovery Act of 1976 (42 U.S.C. 6901-6986) (RCRA), or hazardous air pollutants under the Clean Air Act Amendments (42 U.S.C. 7403-7626); however, for the purposes of establishing the agency's baseline under 3-302(c), such "other chemicals" are in addition to (not instead of) the section 313 chemicals. The term "toxic pollutants" does not include hazardous waste subject to remedial action generated prior to the date of this order.

Sec. 3-3. Implementation.

3-301. *Federal Agency Strategy*. Within 12 months of the date of this order, the head of each Federal agency must develop a written pollution prevention strategy to achieve the requirements specified in sections 3-302 through 3-305 of this order for that agency. A copy thereof shall be provided to the Administrator. Federal agencies are encouraged to involve the public in developing the required strategies under this order and in monitoring their subsequent progress in meeting the requirements of this order. The strategy shall include, but shall not be limited to, the following elements:

(a) A pollution prevention policy statement, developed by each Federal agency, designating principal responsibilities for development, implementation, and evaluation of the strategy. The statement shall reflect the Federal agency's commitment to incorporate pollution prevention through source reduction in facility management and acquisition, and it shall identify an individual responsible for coordinating the Federal agency's efforts in this area.

(b) A commitment to utilize pollution prevention through source reduction, where practicable, as the primary means of achieving and maintaining compliance with all applicable Federal, State, and local environmental requirements.

3-302. *Toxic Chemical Reduction Goals*. (a) The head of each Federal agency subject to this order shall ensure that the agency develops voluntary goals to reduce the agency's total releases of toxic chemicals to the environment and off-site transfers of such toxic chemicals for treatment and disposal from facilities covered by this order by 50 percent by December 31, 1999. To the maximum extent practicable, such reductions shall be achieved by implementation of source reduction practices.

(b) The baseline for measuring reductions for purposes of achieving the 50 percent reduction goal for each Federal agency shall be the first year in which releases of toxic chemicals to the environment and off-site transfers of such chemicals for treatment and disposal are publicly reported. The baseline amount as to which the 50 percent reduction goal applies shall be the aggregate amount of toxic chemicals reported in the baseline year for all of that Federal agency's facilities meeting the threshold applicability requirements set forth in section 1-102 of this order. In no event shall the baseline be later than the 1994 reporting year.

(c) Alternatively, a Federal agency may choose to achieve a 50 percent reduction goal for toxic pollutants. In such event, the Federal agency shall delineate the scope of its reduction program in the written pollution prevention strategy

that is required by section 3-301 of this order. The baseline for measuring reductions for purposes of achieving the 50 percent reduction requirement for each Federal agency shall be the first year in which releases of toxic pollutants to the environment and off-site transfers of such chemicals for treatment and disposal are publicly reported for each of that Federal agency's facilities encompassed by section 3-301. In no event shall the baseline year be later than the 1994 reporting year. The baseline amount as to which the 50 percent reduction goal applies shall be the aggregate amount of toxic pollutants reported by the agency in the baseline year. For any toxic pollutants included by the agency in determining its baseline under this section, in addition to toxic chemicals under EPCRA, the agency shall report on such toxic pollutants annually under the provisions of section 3-304 of this order, if practicable, or through an agency report that is made available to the public.

(d) The head of each Federal agency shall ensure that each of its covered facilities develops a written pollution prevention plan no later than the end of 1995, which sets forth the facility's contribution to the goal established in section 3-302(a) of this order. Federal agencies shall conduct assessments of their facilities as necessary to ensure development of such plans and of the facilities' pollution prevention programs.

3-303. Acquisition and Procurement Goals. (a) Each Federal agency shall establish a plan and goals for eliminating or reducing the unnecessary acquisition by that agency of products containing extremely hazardous substances or toxic chemicals. Similarly, each Federal agency shall establish a plan and goal for voluntarily reducing its own manufacturing, processing, and use of extremely hazardous substances and toxic chemicals. Priorities shall be developed by Federal agencies, in coordination with EPA, for implementing this section.

(b) Within 24 months of the date of this order, the Department of Defense (DOD) and the General Services Administration (GSA), and other agencies, as appropriate, shall review their agency's standardized documents, including specifications and standards, and identify opportunities to eliminate or reduce the use by their agency of extremely hazardous substances and toxic chemicals, consistent with the safety and reliability requirements of their agency mission. The EPA shall assist agencies in meeting the requirements of this section, including identifying substitutes and setting priorities for these reviews. By 1999, DOD, GSA and other affected agencies shall make all appropriate revisions to these specifications and standards.

(c) Any revisions to the Federal Acquisition Regulation (FAR) necessary to implement this order shall be made within 24 months of the date of this order.

(d) Federal agencies are encouraged to develop and test innovative pollution prevention technologies at their facilities in order to encourage the development of strong markets for such technologies. Partnerships should be encouraged between industry, Federal agencies, Government laboratories, academia, and others to assess and deploy innovative environmental technologies for domestic use and for markets abroad.

3-304. Toxics Release Inventory/Pollution Prevention Act Reporting. (a) The head of each Federal agency shall comply with the provisions set forth in section 313 of EPCRA, section 6607 of PPA, all implementing regulations, and future amendments to these authorities, in light of applicable guidance as provided by EPA.

(b) The head of each Federal agency shall comply with these provisions without regard to the Standard Industrial Classification (SIC) delineations that apply to the Federal agency's facilities, and such reports shall be for all releases, transfers, and wastes at such Federal agency's facility without regard to the SIC code of the activity leading to the release, transfer, or waste. All other existing statutory or regulatory limitations or exemptions on the application of EPCRA section 313 shall apply to the reporting requirements set forth in section 3-304(a) of this order.

(c) The first year of compliance shall be no later than for the 1994 calendar year with reports due on or before July 1, 1995

3-305. *Emergency Planning and Community Right-to-Know Reporting Responsibilities.* The head of each Federal agency shall comply with the provisions set forth in sections 301 through 312 of EPCRA, all implementing regulations, and future amendments to these authorities in light of any applicable guidance as provided by EPA. Effective dates for compliance shall be: (a) With respect to the provisions of section 302 of EPCRA emergency planning notification shall be made no later than 7 months after the date of this order.

(b) With respect to the provisions of section 303 of EPCRA all information necessary for the applicable Local Emergency Planning Committee (LEPC's) to prepare or revise local Emergency Response Plans shall be provided no later than 1 year after the date of this order.

(c) To the extent that a facility is required to maintain Material Safety Data Sheets under any provisions of law or Executive order, information required under section 311 of EPCRA shall be submitted no later than 1 year after the date of this order, and the first year of compliance with section 312 shall be no later than the 1994 calendar year, with reports due on or before March 1, 1995.

(d) The provisions of section 304 of EPCRA shall be effective beginning January 1, 1994.

(e) These compliance dates are not intended to delay implementation of earlier timetables already agreed to by Federal agencies and are inapplicable to the extent they interfere with those timetables.

Sec. 4-4. *Agency Coordination.*

4-401. By February 1, 1994, the Administrator shall convene an interagency Task Force composed of the Administrator, the Secretaries of Commerce, Defense, and Energy, the Administrator of General Services, the Administrator of the Office of Procurement Policy in the Office of Management and Budget, and such other agency officials as deemed appropriate based upon lists of potential participants submitted to the Administrator pursuant to this section by the agency head. Each agency head may designate other senior agency officials to act in his/her stead, where appropriate. The Task Force will assist the agency heads in the implementation of the activities required under this order.

4-402. Federal agencies subject to the requirements of this order shall submit annual progress reports to the Administrator beginning on October 1, 1995. These reports all include a description of the progress that the agency has made in complying with all aspects of this order, including the pollution reductions requirements. This reporting requirement shall expire after the report due on October 1, 2001.

4-403. *Technical Advice.* Upon request and to the extent practicable, the Administrator shall provide technical advice and assistance to Federal agencies in order to foster full compliance with this order. In addition, to the extent practicable, all Federal agencies subject to this order shall provide technical assistance, if requested, to LEPC's in their development of emergency response plans and in fulfillment of their community right-to-know and risk reduction responsibilities.

4-404. Federal agencies shall place high priority on obtaining funding and resources needed for implementing all aspects of this order, including the pollution prevention strategies, plans, and assessments required by this order, by identifying, requesting, and allocating funds through line-item or direct funding requests. Federal agencies shall make such requests as required in the Federal Agency Pollution Prevention and Abatement Planning Process and through agency budget requests as outlined in Office of Management and Budget (OMB) Circulars A-106 and A-11, respectively. Federal agencies should apply to the maximum extent practicable, a life cycle analysis and total cost accounting principles to all projects needed to meet the requirements of this order.

4-405. *Federal Government Environmental Challenge Program.* The Administrator shall establish a "Federal Government Environmental Challenge Program" to recognize outstanding environmental management performance in Federal agencies and facilities. The program shall consist of two components that challenge Federal agencies; (a) to agree to a code of environmental principles to be developed by EPA, in cooperation with other agencies, that emphasizes pollution prevention, sustainable development and state-of-the-art environmental management programs, and (b) to submit applications to EPA for individual Federal agency facilities for recognition as "Model Installations." The program shall also include a means for recognizing individual Federal employees who demonstrate outstanding leadership in pollution prevention.

Sec 5-5. Compliance.

5-501. By December 31, 1993, the head of each Federal agency shall provide the Administrator with a preliminary list of facilities that potentially meet the requirements for reporting under the threshold provisions of EPCRA, PPA, and this order.

5-502. The head of each Federal agency is responsible for ensuring that such agency take all necessary actions to prevent pollution in accordance with this order, and for that agency's compliance with the provisions of EPCRA and PPA. Compliance with EPCRA and PPA means compliance with the same substantive, procedural, and other statutory and regulatory requirements that would apply to a private person. Nothing in this order shall be construed as making the provisions of sections 325 and 326 of EPCRA applicable to any Federal agency or facility, except to the extent that such Federal agency or facility would independently be subject to such provisions. EPA shall consult with Federal agencies, if requested, to determine the applicability of this order to particular agency facilities.

5-503. Each Federal agency subject to this order shall conduct internal reviews and audits, and take such other steps, as may be necessary to monitor compliance with sections 3-304 and 3-305 of this order.

5-504. The Administrator, in consultation with the heads of Federal agencies, may conduct such reviews and inspections as may be necessary to monitor compliance with sections 3-304 and 3-305 of this order. Except as excluded under section 6-601 of this order, all Federal agencies are encouraged to cooperate fully with the efforts of the Administrator to ensure compliance with sections 3-304 and 3-305 of this order.

5-505. Federal agencies are further encouraged to comply with all state and local right-to-know and pollution prevention requirements to the extent that compliance with such laws and requirements is not otherwise already mandated.

5-506. Whenever the Administrator notifies a Federal agency that it is not in compliance with an applicable provision of this order, the Federal agency shall achieve compliance as promptly as is practicable.

5-507. The EPA shall report annually to the President on Federal agency compliance with the provisions of section 3-304 of this order.

5-508. To the extent permitted by law and unless such documentation is withheld pursuant to section 6-601 of this order, the public shall be afforded ready access to all strategies, plans, and reports required to be prepared by Federal agencies under this order by the agency preparing the strategy, plan, or report. When the reports are submitted to EPA, EPA shall compile the strategies, plans, and reports and make them publicly available as well. Federal agencies are encouraged to provide such strategies, plans, and reports to the State and local authorities where their facilities are located for an additional point of access to the public.

Sec. 6-6. Exemption.

6-601. In the interest of national security, the head of a Federal agency may request from the President an exemption from complying with the provisions of any or all aspects of this order for particular Federal agency facilities, provided that the procedures set forth in section 120(j)(1) of the Comprehensive Environmental Response, Compensation, and Liability Act of 1980, as amended (42 U.S.C. 9620(j)(1)), are followed. To the maximum extent practicable, and without compromising national security, all Federal agencies shall strive to comply with the purposes, goals, and implementation steps set forth in this order.

Sec. 7-7. General Provisions.

7-701. Nothing in this order shall create any right or benefit, substantive or procedural, enforceable by a party against the United States, its agencies or instrumentalities, its officers or employees, or any other person.



THE WHITE HOUSE.

August 3, 1993.

[FR Doc. 93-19069

Filed 8-4-93; 4:37 pm]

Billing code 3195-01-P

Appendix L

Title 40, CFR, 1995 Revision, Part 112.7;
Oil Pollution Prevention

late the requirements of this part 112 by failing or refusing to comply with any of the provisions of § 112.3, § 112.4 or § 112.5 shall be liable for a civil penalty of not more than \$5,000 for each day such violation continues. Civil penalties shall be imposed in accordance with procedures set out in part 114 of this subchapter D.

(57 FR 52705, Nov. 4, 1992)

§ 112.7 Guidelines for the preparation and implementation of a Spill Prevention Control and Countermeasure Plan.

The SPCC Plan shall be a carefully thought-out plan, prepared in accordance with good engineering practices, and which has the full approval of management at a level with authority to commit the necessary resources. If the plan calls for additional facilities or procedures, methods, or equipment not yet fully operational, these items should be discussed in separate paragraphs, and the details of installation and operational start-up should be explained separately. The complete SPCC Plan shall follow the sequence outlined below, and include a discussion of the facility's conformance with the appropriate guidelines listed:

(a) A facility which has experienced one or more spill events within twelve months prior to the effective date of this part should include a written description of each such spill, corrective action taken and plans for preventing recurrence.

(b) Where experience indicates a reasonable potential for equipment failure (such as tank overflow, rupture, or leakage), the plan should include a prediction of the direction, rate of flow, and total quantity of oil which could be discharged from the facility as a result of each major type of failure.

(c) Appropriate containment and/or diversionary structures or equipment to prevent discharged oil from reaching a navigable water course should be provided. One of the following preventive systems or its equivalent should be used as a minimum:

(i) Onshore facilities:

(i) Dikes, berms or retaining walls sufficiently impervious to contain spilled oil;

(ii) Curbing;

(iii) Culverting, gutters or other drainage systems;

(iv) Weirs, booms or other barriers;

(v) Spill diversion ponds;

(vi) Retention ponds;

(vii) Sorbent materials.

(2) Offshore facilities:

(i) Curbing, drip pans;

(ii) Sumps and collection systems.

(d) When it is determined that the installation of structures or equipment listed in § 112.7(c) to prevent discharged oil from reaching the navigable waters is not practicable from any onshore or offshore facility, the owner or operator should clearly demonstrate such impracticability and provide the following:

(1) A strong oil spill contingency plan following the provision of 40 CFR part 109.

(2) A written commitment of manpower, equipment and materials required to expeditiously control and remove any harmful quantity of oil discharged.

(e) In addition to the minimal prevention standards listed under § 112.7(c), sections of the Plan should include a complete discussion of conformance with the following applicable guidelines, other effective spill prevention and containment procedures (or, if more stringent, with State rules, regulations and guidelines):

(1) *Facility drainage (onshore); (excluding production facilities).* (i) Drainage from diked storage areas should be restrained by valves or other positive means to prevent a spill or other excessive leakage of oil into the drainage system or inplant effluent treatment system, except where plan systems are designed to handle such leakage. Diked areas may be emptied by pumps or ejectors; however, these should be manually activated and the condition of the accumulation should be examined before starting to be sure no oil will be discharged into the water.

(ii) Flapper-type drain valves should not be used to drain diked areas. Valves used for the drainage of diked areas should, as far as practical, be of manual, open-and-closed design. When plant drainage drains directly into water courses and not into wastewater treatment plants, retained storm water should be inspected as provided in

paragraphs (e)(2)(iii) (B), (C) and (D) of this section before drainage.

(iii) Plant drainage systems from undiked areas should, if possible, flow into ponds, lagoons or catchment basins, designed to retain oil or return it to the facility. Catchment basins should not be located in areas subject to periodic flooding.

(iv) If plant drainage is not engineered as above, the final discharge of all in-plant ditches should be equipped with a diversion system that could, in the event of an uncontrolled spill, return the oil to the plant.

(v) Where drainage waters are treated in more than one treatment unit, natural hydraulic flow should be used. If pump transfer is needed, two "lift" pumps should be provided, and at least one of the pumps should be permanently installed when such treatment is continuous. In any event, whatever techniques are used facility drainage systems should be adequately engineered to prevent oil from reaching navigable waters in the event of equipment failure or human error at the facility.

(2) *Bulk storage tanks (onshore); (excluding production facilities).* (i) No tank should be used for the storage of oil unless its material and construction are compatible with the material stored and conditions of storage such as pressure and temperature, etc.

(ii) All bulk storage tank installations should be constructed so that a secondary means of containment is provided for the entire contents of the largest single tank plus sufficient freeboard to allow for precipitation. Diked areas should be sufficiently impervious to contain spilled oil. Dikes, containment curbs, and pits are commonly employed for this purpose, but they may not always be appropriate. An alternative system could consist of a complete drainage trench enclosure arranged so that a spill could terminate and be safely confined in an in-plant catchment basin or holding pond.

(iii) Drainage of rainwater from the diked area into a storm drain or an effluent discharge that empties into an open water course, lake, or pond, and bypassing the in-plant treatment system may be acceptable if:

(A) The bypass valve is normally sealed closed.

(B) Inspection of the run-off rain water ensures compliance with applicable water quality standards and will not cause a harmful discharge as defined in 40 CFR part 110.

(C) The bypass valve is opened, and resealed following drainage under responsible supervision.

(D) Adequate records are kept of such events.

(iv) Buried metallic storage tanks represent a potential for undetected spills. A new buried installation should be protected from corrosion by coatings, cathodic protection or other effective methods compatible with local soil conditions. Such buried tanks should at least be subjected to regular pressure testing.

(v) Partially buried metallic tanks for the storage of oil should be avoided, unless the buried section of the shell is adequately coated, since partial burial in damp earth can cause rapid corrosion of metallic surfaces, especially at the earth/air interface.

(vi) Aboveground tanks should be subject to periodic integrity testing, taking into account tank design (floating roof, etc.) and using such techniques as hydrostatic testing, visual inspection or a system of non-destructive shell thickness testing. Comparison records should be kept where appropriate, and tank supports and foundations should be included in these inspections. In addition, the outside of the tank should frequently be observed by operating personnel for signs of deterioration, leaks which might cause a spill, or accumulation of oil inside diked areas.

(vii) To control leakage through defective internal heating coils, the following factors should be considered and applied, as appropriate.

(A) The steam return or exhaust lines from internal heating coils which discharge into an open water course should be monitored for contamination, or passed through a settling tank, skimmer, or other separation or retention system.

(B) The feasibility of installing an external heating system should also be considered.

(viii) New and old tank installations should, as far as practical, be fail-safe engineered or updated into a fail-safe engineered installation to avoid spills. Consideration should be given to providing one or more of the following devices:

(A) High liquid level alarms with an audible or visual signal at a constantly manned operation or surveillance station; in smaller plants an audible air vent may suffice.

(B) Considering size and complexity of the facility, high liquid level pump cutoff devices set to stop flow at a predetermined tank content level.

(C) Direct audible or code signal communication between the tank gauger and the pumping station.

(D) A fast response system for determining the liquid level of each bulk storage tank such as digital computers, telepulse, or direct vision gauges or their equivalent.

(E) Liquid level sensing devices should be regularly tested to insure proper operation.

(ix) Plant effluents which are discharged into navigable waters should have disposal facilities observed frequently enough to detect possible system upsets that could cause an oil spill event.

(x) Visible oil leaks which result in a loss of oil from tank seams, gaskets, rivets and bolts sufficiently large to cause the accumulation of oil in diked areas should be promptly corrected.

(xi) Mobile or portable oil storage tanks (onshore) should be positioned or located so as to prevent spilled oil from reaching navigable waters. A secondary means of containment, such as dikes or catchment basins, should be furnished for the largest single compartment or tank. These facilities should be located where they will not be subject to periodic flooding or washout.

(3) *Facility transfer operations, pumping, and in-plant process (onshore); (excluding production facilities).* (i) Buried piping installations should have a protective wrapping and coating and should be cathodically protected if soil conditions warrant. If a section of buried line is exposed for any reason, it should be carefully examined for deterioration. If corrosion damage is found, additional examination and corrective

action should be taken as indicated by the magnitude of the damage. An alternative would be the more frequent use of exposed pipe corridors or galleries.

(ii) When a pipeline is not in service, or in standby service for an extended time the terminal connection at the transfer point should be capped or blank-flanged, and marked as to origin.

(iii) Pipe supports should be properly designed to minimize abrasion and corrosion and allow for expansion and contraction.

(iv) All aboveground valves and pipelines should be subjected to regular examinations by operating personnel at which time the general condition of items, such as flange joints, expansion joints, valve glands and bodies, catch pans, pipeline supports, locking of valves, and metal surfaces should be assessed. In addition, periodic pressure testing may be warranted for piping in areas where facility drainage is such that a failure might lead to a spill event.

(v) Vehicular traffic granted entry into the facility should be warned verbally or by appropriate signs to be sure that the vehicle, because of its size, will not endanger above ground piping.

(4) *Facility tank car and tank truck loading/unloading rack (onshore).* (i) Tank car and tank truck loading/unloading procedures should meet the minimum requirements and regulation established by the Department of Transportation.

(ii) Where rack area drainage does not flow into a catchment basin or treatment facility designed to handle spills, a quick drainage system should be used for tank truck loading and unloading areas. The containment system should be designed to hold at least maximum capacity of any single compartment of a tank car or tank truck loaded or unloaded in the plant.

(iii) An interlocked warning light or physical barrier system, or warning signs, should be provided in loading/unloading areas to prevent vehicular departure before complete disconnect of flexible or fixed transfer lines.

(iv) Prior to filling and departure of any tank car or tank truck, the lowermost drain and all outlets of such vehicles should be closely examined for leakage, and if necessary, tightened,

adjusted, or replaced to prevent liquid leakage while in transit.

(5) *Oil production facilities (onshore)—*
(i) *Definition.* An onshore production facility may include all wells, flowlines, separation equipment, storage facilities, gathering lines, and auxiliary non-transportation-related equipment and facilities in a single geographical oil or gas field operated by a single operator.

(ii) *Oil production facility (onshore) drainage.* (A) At tank batteries and central treating stations where an accidental discharge of oil would have a reasonable possibility of reaching navigable waters, the dikes or equivalent required under § 112.7(c)(1) should have drains closed and sealed at all times except when rainwater is being drained. Prior to drainage, the diked area should be inspected as provided in paragraphs (e)(2)(iii) (B), (C), and (D) of this section. Accumulated oil on the rainwater should be picked up and returned to storage or disposed of in accordance with approved methods.

(B) Field drainage ditches, road ditches, and oil traps, sumps or skimmers, if such exist, should be inspected at regularly scheduled intervals for accumulation of oil that may have escaped from small leaks. Any such accumulations should be removed.

(iii) *Oil production facility (onshore) bulk storage tanks.* (A) No tank should be used for the storage of oil unless its material and construction are compatible with the material stored and the conditions of storage.

(B) All tank battery and central treating plant installations should be provided with a secondary means of containment for the entire contents of the largest single tank if feasible, or alternate systems such as those outlined in § 112.7(c)(1). Drainage from undiked areas should be safely confined in a catchment basin or holding pond.

(C) All tanks containing oil should be visually examined by a competent person for condition and need for maintenance on a scheduled periodic basis. Such examination should include the foundation and supports of tanks that are above the surface of the ground.

(D) New and old tank battery installations should, as far as practical, be fail-safe engineered or updated into a

fail-safe engineered installation to prevent spills. Consideration should be given to one or more of the following:

(1) Adequate tank capacity to assure that a tank will not overflow should a pumper/gauger be delayed in making his regular rounds.

(2) Overflow equalizing lines between tanks so that a full tank can overflow to an adjacent tank.

(3) Adequate vacuum protection to prevent tank collapse during a pipeline run.

(4) High level sensors to generate and transmit an alarm signal to the computer where facilities are a part of a computer production control system.

(iv) *Facility transfer operations, oil production facility (onshore).* (A) All above ground valves and pipelines should be examined periodically on a scheduled basis for general condition of items such as flange joints, valve glands and bodies, drip pans, pipeline supports, pumping well polish rod stuffing boxes, bleeder and gauge valves.

(B) Salt water (oil field brine) disposal facilities should be examined often, particularly following a sudden change in atmospheric temperature to detect possible system upsets that could cause an oil discharge.

(C) Production facilities should have a program of flowline maintenance to prevent spills from this source. The program should include periodic examinations, corrosion protection, flowline replacement, and adequate records, as appropriate, for the individual facility.

(6) *Oil drilling and workover facilities (onshore).* (i) Mobile drilling or workover equipment should be positioned or located so as to prevent spilled oil from reaching navigable waters.

(ii) Depending on the location, catchment basins or diversion structures may be necessary to intercept and contain spills of fuel, crude oil, or oily drilling fluids.

(iii) Before drilling below any casing string or during workover operations, a blowout prevention (BOP) assembly and well control system should be installed that is capable of controlling any well head pressure that is expected to be encountered while that BOP assembly is on the well. Casing and BOP installations should be in accordance

with State regulatory agency requirements.

(7) *Oil drilling, production, or workover facilities (offshore)*. (i) Definition: "An oil drilling, production or workover facility (offshore)" may include all drilling or workover equipment, wells, flowlines, gathering lines, platforms, and auxiliary nontransportation-related equipment and facilities in a single geographical oil or gas field operated by a single operator.

(ii) Oil drainage collection equipment should be used to prevent and control small oil spillage around pumps, glands, valves, flanges, expansion joints, hoses, drain lines, separators, treaters, tanks, and allied equipment. Drains on the facility should be controlled and directed toward a central collection sump or equivalent collection system sufficient to prevent discharges of oil into the navigable waters of the United States. Where drains and sumps are not practicable oil contained in collection equipment should be removed as often as necessary to prevent overflow.

(iii) For facilities employing a sump system, sump and drains should be adequately sized and a spare pump or equivalent method should be available to remove liquid from the sump and assure that oil does not escape. A regular scheduled preventive maintenance inspection and testing program should be employed to assure reliable operation of the liquid removal system and pump start-up device. Redundant automatic sump pumps and control devices may be required on some installations.

(iv) In areas where separators and treaters are equipped with dump valves whose predominant mode of failure is in the closed position and pollution risk is high, the facility should be specially equipped to prevent the escape of oil. This could be accomplished by extending the flare line to a diked area if the separator is near shore, equipping it with a high liquid level sensor that will automatically shut-in wells producing to the separator, parallel redundant dump valves, or other feasible alternatives to prevent oil discharges.

(v) Atmospheric storage or surge tanks should be equipped with high liquid level sensing devices or other ac-

ceptable alternatives to prevent oil discharges.

(vi) Pressure tanks should be equipped with high and low pressure sensing devices to activate an alarm and/or control the flow or other acceptable alternatives to prevent oil discharges.

(vii) Tanks should be equipped with suitable corrosion protection.

(viii) A written procedure for inspecting and testing pollution prevention equipment and systems should be prepared and maintained at the facility. Such procedures should be included as part of the SPCC Plan.

(ix) Testing and inspection of the pollution prevention equipment and systems at the facility should be conducted by the owner or operator on a scheduled periodic basis commensurate with the complexity, conditions and circumstances of the facility or other appropriate regulations.

(x) Surface and subsurface well shut-in valves and devices in use at the facility should be sufficiently described to determine method of activation or control, e.g., pressure differential, change in fluid or flow conditions, combination of pressure and flow, manual or remote control mechanisms. Detailed records for each well, while not necessarily part of the plan should be kept by the owner or operator.

(xi) Before drilling below any casing string, and during workover operations a blowout preventer (BOP) assembly and well control system should be installed that is capable of controlling any well-head pressure that is expected to be encountered while that BOP assembly is on the well. Casing and BOP installations should be in accordance with State regulatory agency requirements.

(xii) Extraordinary well control measures should be provided should emergency conditions, including fire, loss of control and other abnormal conditions, occur. The degree of control system redundancy should vary with hazard exposure and probable consequences of failure. It is recommended that surface shut-in systems have redundant or "fail close" valving. Sub-surface safety valves may not be needed in producing wells that will not flow

but should be installed as required by applicable State regulations.

(xiii) In order that there will be no misunderstanding of joint and separate duties and obligations to perform work in a safe and pollution free manner, written instructions should be prepared by the owner or operator for contractors and subcontractors to follow whenever contract activities include servicing a well or systems appurtenant to a well or pressure vessel. Such instructions and procedures should be maintained at the offshore production facility. Under certain circumstances and conditions such contractor activities may require the presence at the facility of an authorized representative of the owner or operator who would intervene when necessary to prevent a spill event.

(xiv) All manifolds (headers) should be equipped with check valves on individual flowlines.

(xv) If the shut-in well pressure is greater than the working pressure of the flowline and manifold valves up to and including the header valves associated with that individual flowline, the flowline should be equipped with a high pressure sensing device and shut-in valve at the wellhead unless provided with a pressure relief system to prevent over pressuring.

(xvi) All pipelines appurtenant to the facility should be protected from corrosion. Methods used, such as protective coatings or cathodic protection, should be discussed.

(xvii) Sub-marine pipelines appurtenant to the facility should be adequately protected against environmental stresses and other activities such as fishing operations.

(xviii) Sub-marine pipelines appurtenant to the facility should be in good operating condition at all times and inspected on a scheduled periodic basis for failures. Such inspections should be documented and maintained at the facility.

(8) *Inspections and records*. Inspections required by this part should be in accordance with written procedures developed for the facility by the owner or operator. These written procedures and a record of the inspections, signed by the appropriate supervisor or inspector, should be made part of the SPCC

Plan and maintained for a period of three years.

(9) *Security (excluding oil production facilities)*. (i) All plants handling, processing, and storing oil should be fully fenced, and entrance gates should be locked and/or guarded when the plant is not in production or is unattended.

(ii) The master flow and drain valves and any other valves that will permit direct outward flow of the tank's content to the surface should be securely locked in the closed position when in non-operating or non-standby status.

(iii) The starter control on all oil pumps should be locked in the "off" position or located at a site accessible only to authorized personnel when the pumps are in a non-operating or non-standby status.

(iv) The loading/unloading connections of oil pipelines should be securely capped or blank-flanged when not in service or standby service for an extended time. This security practice should also apply to pipelines that are emptied of liquid content either by draining or by inert gas pressure.

(v) Facility lighting should be commensurate with the type and location of the facility. Consideration should be given to: (A) Discovery of spills occurring during hours of darkness, both by operating personnel, if present, and by non-operating personnel (the general public, local police, etc.) and (B) prevention of spills occurring through acts of vandalism.

(10) *Personnel, training and spill prevention procedures*. (i) Owners or operators are responsible for properly instructing their personnel in the operation and maintenance of equipment to prevent the discharges of oil and applicable pollution control laws, rules and regulations.

(ii) Each applicable facility should have a designated person who is accountable for oil spill prevention and who reports to line management.

(iii) Owners or operators should schedule and conduct spill prevention briefings for their operating personnel at intervals frequent enough to assure adequate understanding of the SPCC Plan for that facility. Such briefings should highlight and describe known spill events or failures, malfunctioning

components, and recently developed precautionary measures.

§ 112.20 Facility response plans.

(a) The owner or operator of any non-transportation-related onshore facility that, because of its location, could reasonably be expected to cause substantial harm to the environment by discharging oil into or on the navigable waters or adjoining shorelines shall prepare and submit a facility response plan to the Regional Administrator, according to the following provisions:

(1) For the owner or operator of a facility in operation on or before February 18, 1993 who is required to prepare and submit a response plan under 33 U.S.C. 1321(j)(5), the Oil Pollution Act of 1990 (Pub. L. 101-380, 33 U.S.C. 2701 *et seq.*) requires the submission of a response plan that satisfies the requirements of 33 U.S.C. 1321(j)(5) no later than February 18, 1993.

(i) The owner or operator of an existing facility that was in operation on or before February 18, 1993 who submitted a response plan by February 18, 1993 shall revise the response plan to satisfy the requirements of this section and resubmit the response plan or updated portions of the response plan to the Regional Administrator by February 18, 1995.

(ii) The owner or operator of an existing facility in operation on or before February 18, 1993 who failed to submit a response plan by February 18, 1993 shall prepare and submit a response plan that satisfies the requirements of this section to the Regional Administrator before August 30, 1994.

(2) The owner or operator of a facility in operation on or after August 30, 1994 that satisfies the criteria in paragraph (f)(1) of this section or that is notified by the Regional Administrator pursuant to paragraph (b) of this section shall prepare and submit a facility response plan that satisfies the requirements of this section to the Regional Administrator.

(i) For a facility that commenced operations after February 18, 1993 but prior to August 30, 1994, and is required to prepare and submit a response plan based on the criteria in paragraph (f)(1) of this section, the owner or operator shall submit the response plan or up-

dated portions of the response plan, along with a completed version of the response plan cover sheet contained in Appendix F to this part, to the Regional Administrator prior to August 30, 1994.

(ii) For a newly constructed facility that commences operation after August 30, 1994, and is required to prepare and submit a response plan based on the criteria in paragraph (f)(1) of this section, the owner or operator shall submit the response plan, along with a completed version of the response plan cover sheet contained in Appendix F to this part, to the Regional Administrator prior to the start of operations (adjustments to the response plan to reflect changes that occur at the facility during the start-up phase of operations must be submitted to the Regional Administrator after an operational trial period of 60 days).

(iii) For a facility required to prepare and submit a response plan after August 30, 1994, as a result of a planned change in design, construction, operation, or maintenance that renders the facility subject to the criteria in paragraph (f)(1) of this section, the owner or operator shall submit the response plan, along with a completed version of the response plan cover sheet contained in Appendix F to this part, to the Regional Administrator before the portion of the facility undergoing change commences operations (adjustments to the response plan to reflect changes that occur at the facility during the start-up phase of operations must be submitted to the Regional Administrator after an operational trial period of 60 days).

(iv) For a facility required to prepare and submit a response plan after August 30, 1994, as a result of an unplanned event or change in facility characteristics that renders the facility subject to the criteria in paragraph (f)(1) of this section, the owner or operator shall submit the response plan, along with a completed version of the response plan cover sheet contained in Appendix F to this part, to the Regional Administrator within six months of the unplanned event or change.

(3) In the event the owner or operator of a facility that is required to prepare

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and submit a response plan uses an alternative formula that is comparable to one contained in Appendix C to this part to evaluate the criterion in paragraph (f)(1)(ii)(B) or (f)(1)(ii)(C) of this section, the owner or operator shall attach documentation to the response plan cover sheet contained in Appendix F to this part that demonstrates the reliability and analytical soundness of the alternative formula.

(b)(1) The Regional Administrator may at any time require the owner or operator of any non-transportation-related onshore facility to prepare and submit a facility response plan under this section after considering the factors in paragraph (f)(2) of this section. If such a determination is made, the Regional Administrator shall notify the facility owner or operator in writing and shall provide a basis for the determination. If the Regional Administrator notifies the owner or operator in writing of the requirement to prepare and submit a response plan under this section, the owner or operator of the facility shall submit the response plan to the Regional Administrator within six months of receipt of such written notification.

(2) The Regional Administrator shall review plans submitted by such facilities to determine whether the facility could, because of its location, reasonably be expected to cause significant and substantial harm to the environment by discharging oil into or on the navigable waters or adjoining shorelines.

(c) The Regional Administrator shall determine whether a facility could, because of its location, reasonably be expected to cause significant and substantial harm to the environment by discharging oil into or on the navigable waters or adjoining shorelines, based on the factors in paragraph (f)(3) of this section. If such a determination is made, the Regional Administrator shall notify the owner or operator of the facility in writing and:

(1) Promptly review the facility response plan;

(2) Require amendments to any response plan that does not meet the requirements of this section;

(3) Approve any response plan that meets the requirements of this section; and

(4) Review each response plan periodically thereafter on a schedule established by the Regional Administrator provided that the period between plan reviews does not exceed five years.

(d)(1) The owner or operator of a facility for which a response plan is required under this part shall revise and resubmit revised portions of the response plan within 60 days of each facility change that materially may affect the response to a worst case discharge, including:

(i) A change in the facility's configuration that materially alters the information included in the response plan;

(ii) A change in the type of oil handled, stored, or transferred that materially alters the required response resources;

(iii) A material change in capabilities of the oil spill removal organization(s) that provide equipment and personnel to respond to discharges of oil described in paragraph (h)(5) of this section;

(iv) A material change in the facility's spill prevention and response equipment or emergency response procedures; and

(v) Any other changes that materially affect the implementation of the response plan.

(2) Except as provided in paragraph (d)(1) of this section, amendments to personnel and telephone number lists included in the response plan and a change in the oil spill removal organization(s) that does not result in a material change in support capabilities do not require approval by the Regional Administrator. Facility owners or operators shall provide a copy of such changes to the Regional Administrator as the revisions occur.

(3) The owner or operator of a facility that submits changes to a response plan as provided in paragraph (d)(1) or (d)(2) of this section shall provide the EPA-issued facility identification number (where one has been assigned) with the changes.

(4) The Regional Administrator shall review for approval changes to a response plan submitted pursuant to paragraph (d)(1) of this section for a fa-

Appendix M

Glossary

GLOSSARY

Abbreviations:

AR	-Army Regulation
AST	-Above Ground Storage Tank
CAA	-Clean Air Act
CERCLA	-Comprehensive Environmental Response, Compensation, Liability Act
CMR	-Code of Massachusetts Regulations
CFR	-Code of Federal Regulations
CT	-Connecticut
CWA	-Clean Water Act
DEP	-Department of Environmental Protection
DLA	-Defense Logistics Agency
DOD	-Department of Defense
ECC	-Environmental Compliance Coordinator
EM	-Engineering Manual
EO	-Executive Order
EPA	-Environmental Protection Agency
EPCRA	-Emergency Planning and Community Right-to-Know Act
ERGO	-Environmental Review Guide for Operations
FY	-Fiscal Year
GSA	-General Services Administration
MEK	-Methyl Ethyl Ketone
MSDS	-Material Safety Data Sheets
NED	-New England Division

NFPA -National Fire Protection Association
NGVD -National Geodetic Vertical Datum
P2 -Pollution Prevention
PCBs -Polychlorinated Biphenols
RCRA -Resource, Conservation, and Recovery Act
RQ -Reportable Quantity
SCP -Spill Contingency Plan
SPCCP -Spill Prevention, Control, and Countermeasure Plan
TRI -Toxics Release Inventory
USACE -U.S. Army Corps of Engineers
UST -Underground Storage Tank
VOCs -Volatile Organic Compounds

Terms:

Disposal: The discharge, deposit, injection, dumping, spilling, leaking, or placing of any solid waste or hazardous waste into or on any land or water so that such waste (or any constituent thereof) may enter the environment or be emitted into the air or discharged into any waters, including groundwater.

Environment: Any one of the following: navigable waters, near-shore and open waters and any surface waters, groundwater, drinking water supply, land surface or subsurface area, and ambient air.

Hazardous Waste: The Resource Conservation and Recovery Act (RCRA) defines hazardous waste as a solid waste (including liquids and gases), or a combination of solid wastes which may, because of its quantity, concentration, or physical, chemical, or infectious characteristics:

a. cause or significantly contribute to an increase in mortality or in serious irreversible, or incapacitating illness; or

b. pose a substantial present or potential hazard to human

health or the environment when improperly treated, stored, transported, disposed of, or otherwise managed.

Certain types of solid wastes are excluded from regulation as hazardous waste. See 40 CFR 261.4 for the complete listing of exclusions.

Hazardous Substance: For the purpose of this plan, a hazardous substance is any one of the following:

a. Any substance designated pursuant to Section 311 (b) (2) (A) of the CWA.

b. Any element, compound, mixture, solution, or substance designated pursuant to Section 102 or 101 (14) of the CERCLA (see Appendix D3)

c. Any hazardous air pollutant under Section 112 of the CAA.

The term does not include (1) petroleum, including crude oil or any fraction thereof, which is not specifically listed or designated as a hazardous substance in the above definition; or (2) natural gas, natural gas liquids, liquified natural gas, or synthetic gas used for fuel (or mixtures of natural gas and such synthetic gas).

Manifest: The shipping document EPA Form 8700-22, and if necessary, EPA Form 8700-22A, originated, signed, and distributed in accordance with the instructions supplied with the manifest form and applicable state requirements.

National Geodetic Vertical Datum: Formerly called "Sea Level Datum of 1929," the datum was derived from the average sea level over a period of many years at 26 tide stations along the Atlantic, Gulf of Mexico, and Pacific Coasts, but it does not necessarily represent local mean sea level at any particular place.

Oil: Oil of any kind or in any form, including but not limited to, petroleum, fuel oil, sludge, oil refuse, and oil mixed with wastes other than dredged spoil.

Reportable Concentration: The threshold (minimum) concentration in soil or groundwater which requires notification to the DEP.

Reportable Quantity: The threshold (minimum) quantity for a CERCLA hazardous substance spill established in Table 302.4 of 40 CFR part 302.

Secondary Containment: Any measure which will retain a spill of the entire contents of the primary container for a sufficient period so that it can be collected or removed without contaminating the environment. Containment must be sufficiently impermeable to contain any spilled material and is normally sized for additional freeboard to allow for precipitation. Any spill that would occur on an impervious surface (e.g. concrete floor or bituminous parking lot) that did not contaminate the environment would be within secondary containment. Secondary containment includes basins, berms, catchment areas, curbing, dikes, drip pans, relief vessels, retaining walls, vaults, and similar devices.

Sheen: An iridescent appearance on the surface of water, normally caused by the presence of oil.

Solid Waste: Waste that includes garbage, refuse, and sludge as well as any solid, semi-solid, liquid, or contained gaseous material that is discarded. A discarded material is one that has been determined to be an inherently waste-like material by the EPA Administrator. Under certain circumstances, recycled materials are considered discarded materials (and therefore solid wastes) if they are used in a manner constituting disposal, burned for energy recovery, reclaimed, or accumulated speculatively. Certain wastes are excluded from being classified as solid wastes. See 40 CFR 261.2 for wastes that are excluded.

Spill: A generic term which encompasses the accidental or deliberate but unpermitted discharge or release of a pollutant.

Appendix N

References

REFERENCES

Title 29, CFR, 1994 rev, Part 1910.106; Flammable and Combustible Liquids

Title 40, CFR, 1994 rev, Part 112; Oil Pollution Prevention

Title 40, CFR, 1994 rev, Part 114; Civil Penalties for Violation of Oil Pollution Prevention Regulations

Title 40, CFR, 1994 rev, Part 116; Designation of Hazardous Substances

Title 40, CFR, 1994 rev, Part 117; Determination of Reportable Quantities for Hazardous Substances

Title 40, CFR, 1994 rev, Part 300; National Oil and Hazardous Substances Pollution Contingency Plan

Title 40, CFR, 1994 rev, Part 302; Designation, Reportable Quantities, and Notification

Title 40, CFR, 1994 rev, Part 355; Emergency Planning and Notification

Title 40, CFR, 1994 rev, Part 372; Toxic Chemical Release Reporting: Community Right-To-Know

Connecticut General Statute, Section 22a-449 to 451

Connecticut Mandatory Recycling Act, PA 87-544

Connecticut, An Act concerning the State Recycling Goal, PA 94-423

Connecticut Department of Environmental Protection, "Business Recycling," 1990

Connecticut Department of Environmental Protection, "Connecticut Recycles Office Paper," 1990

Connecticut Business Environmental Council, Inc., "The Business Recycling Handbook"

EM 385-1-1, October 1992, Safety and Health Requirements Manual

AR 200-1, April 1990; Environmental Protection Enhancement

Executive Order 12856, August 3, 1993, Federal Compliance and Right-to-Know Laws and Pollution Prevention Requirements

NFPA 30, 1990 Edition, Flammable and Combustible Liquids Code

Appendix O

Amendments/Changes to P2 Plan